

Title: MONITORING ACTIVITY OF A  
USER IN LOCOMOTION ON FOOT  
INVENTOR: Ohlenbusch, et al.  
Serial No.: 09/643,190  
Docket No.: P00663.70020 (RMA)

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6493652

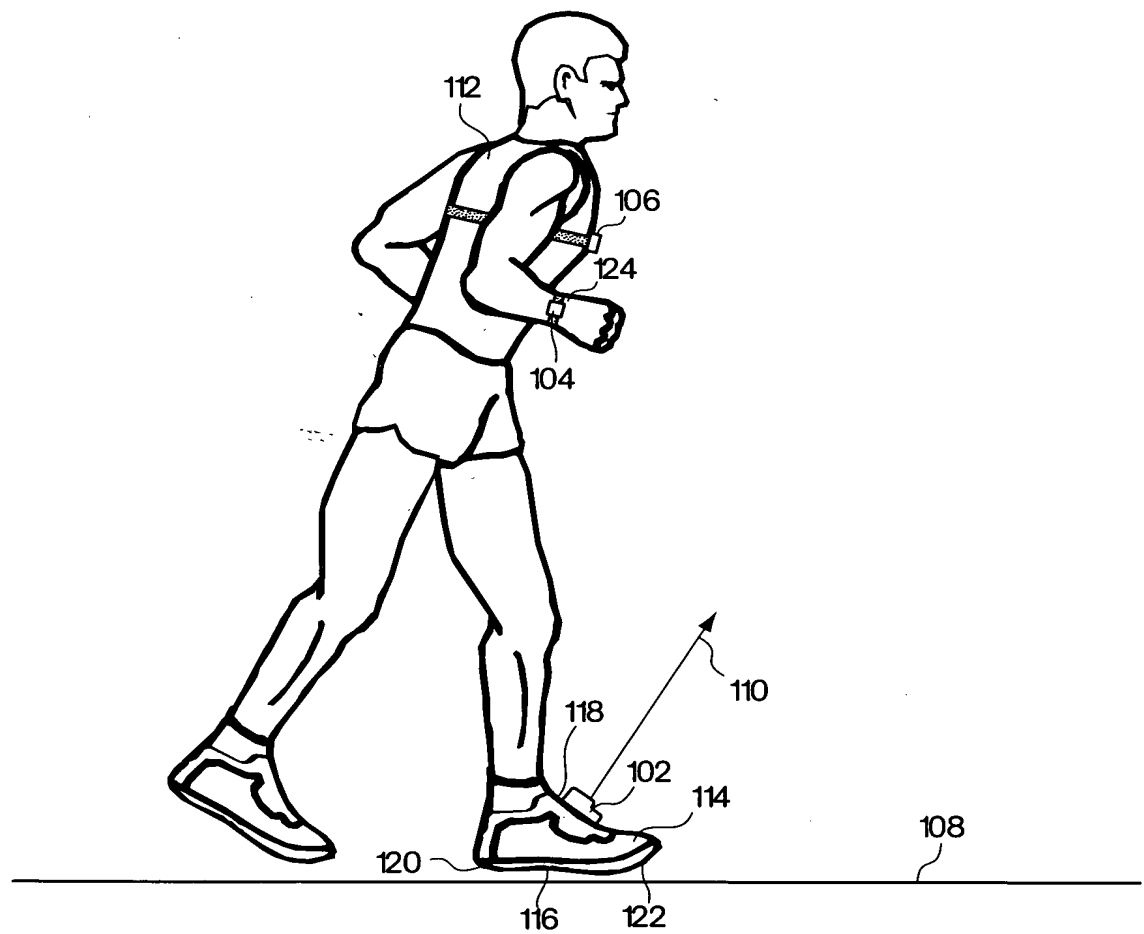


Fig. 1

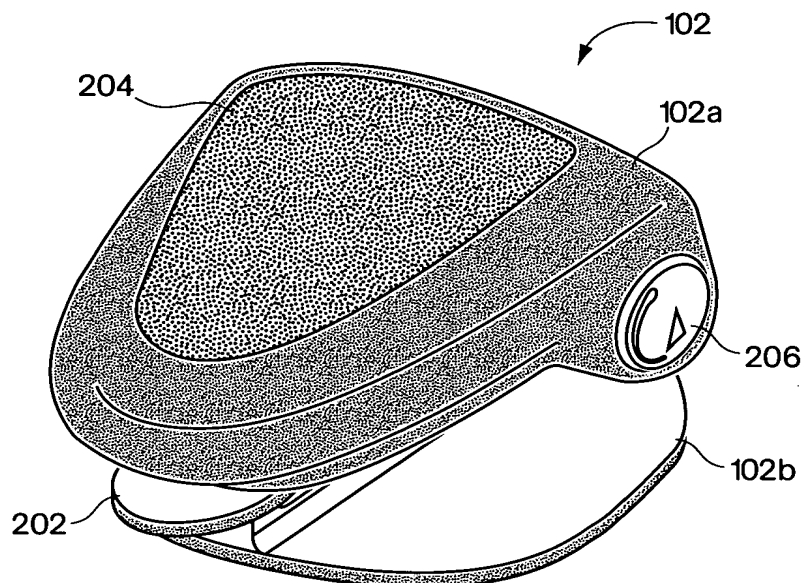
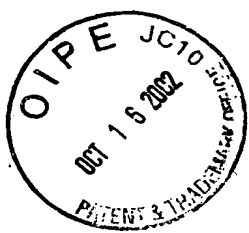


Fig. 2A

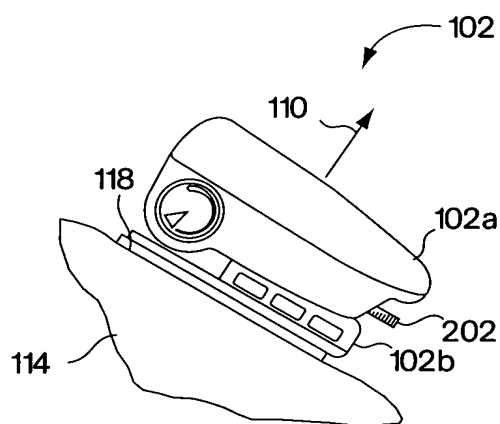
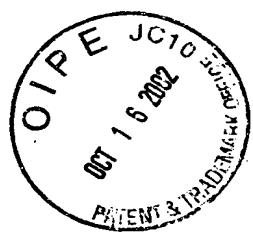


Fig. 2B



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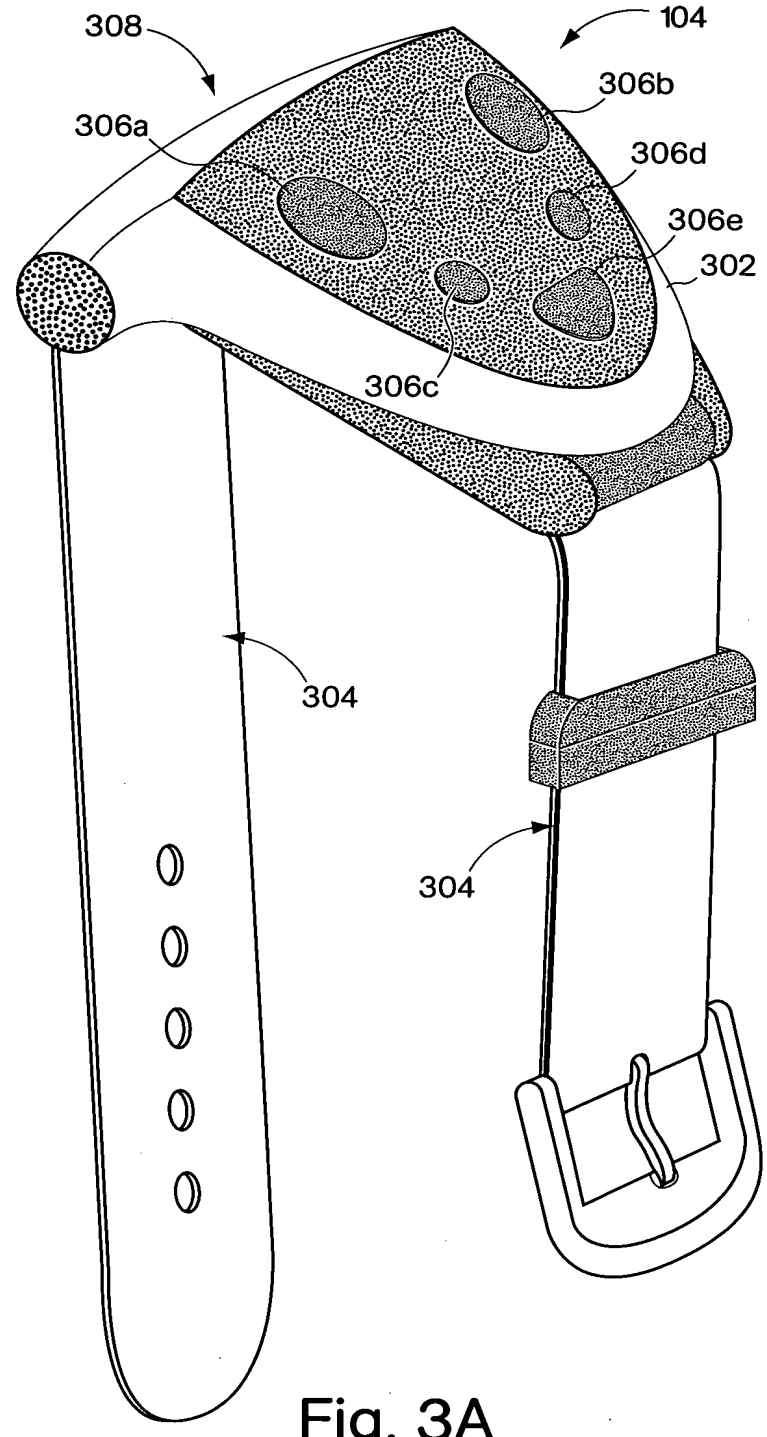


Fig. 3A

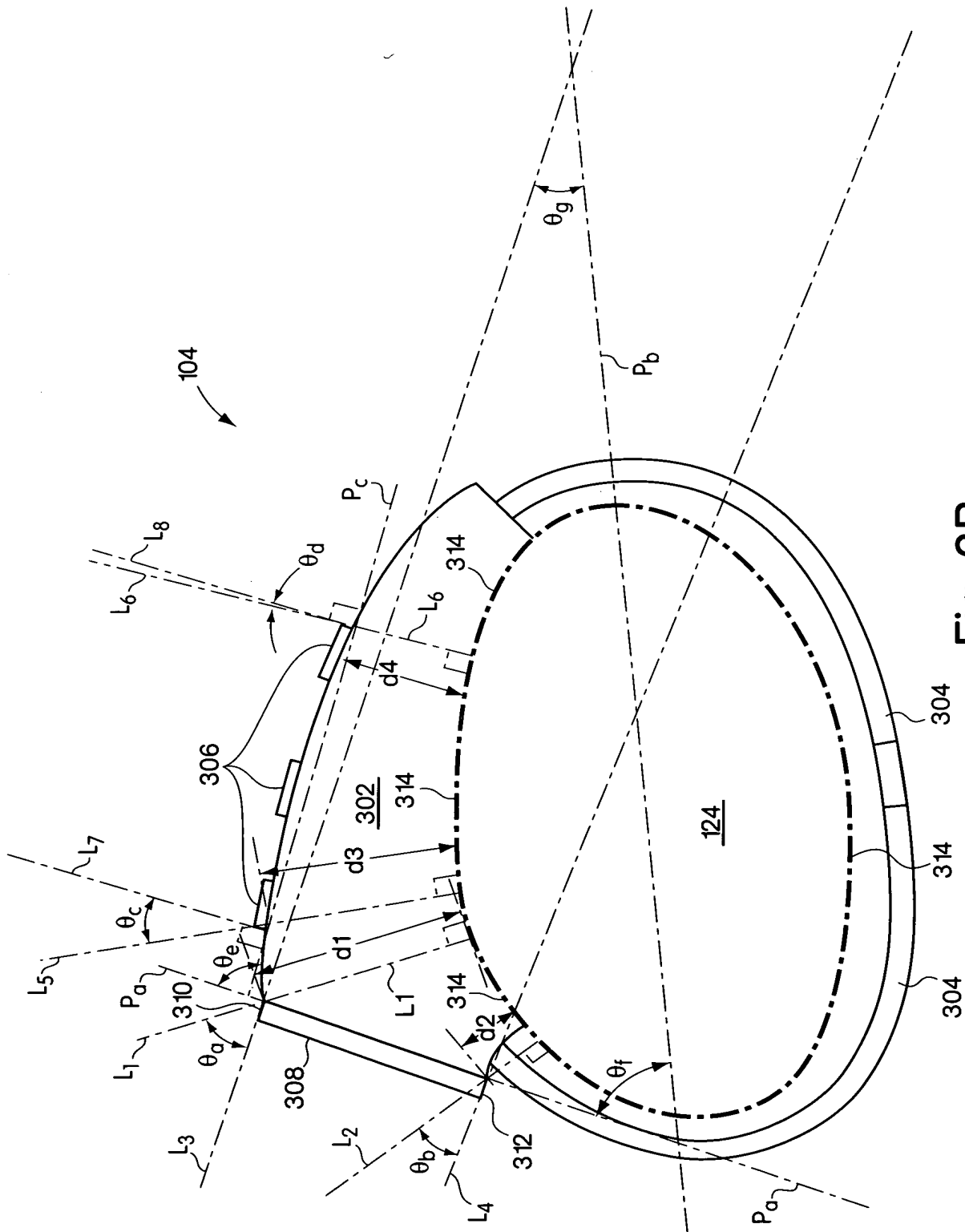
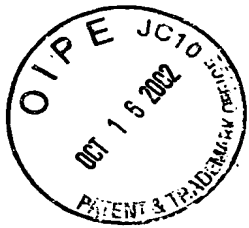
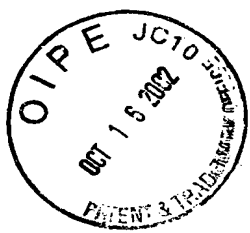


Fig. 3B



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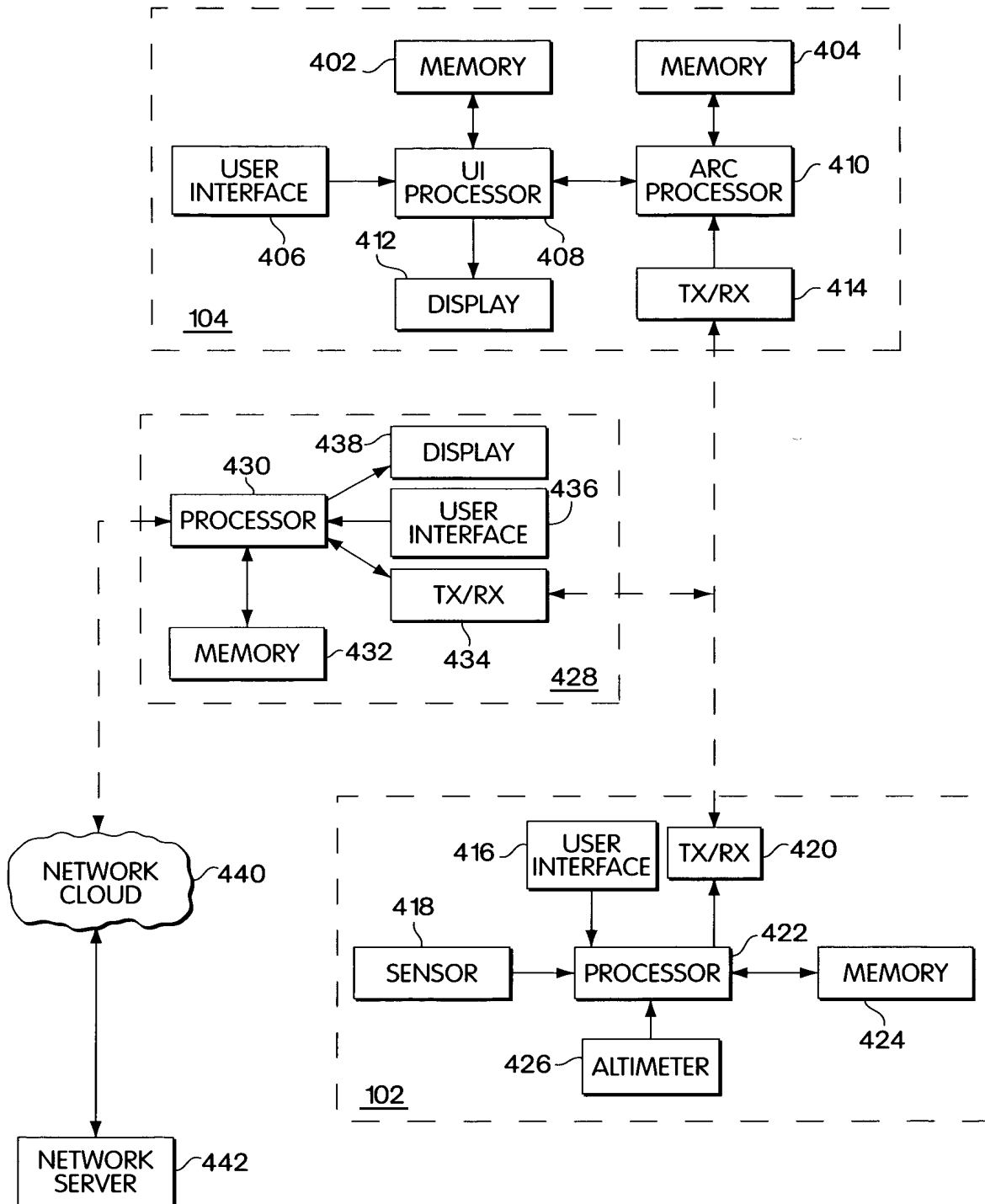
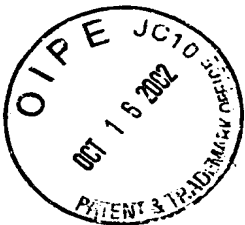


Fig. 4



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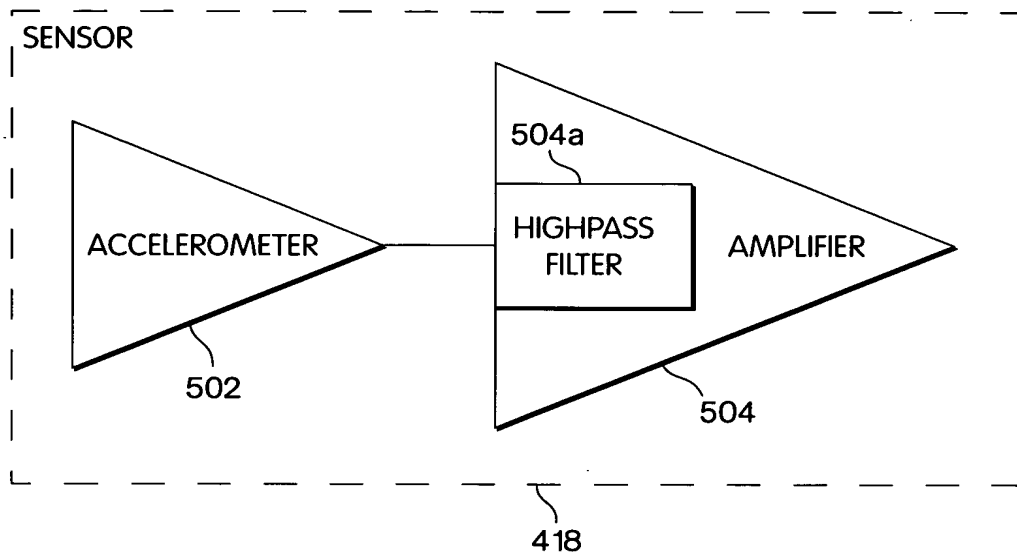


Fig. 5

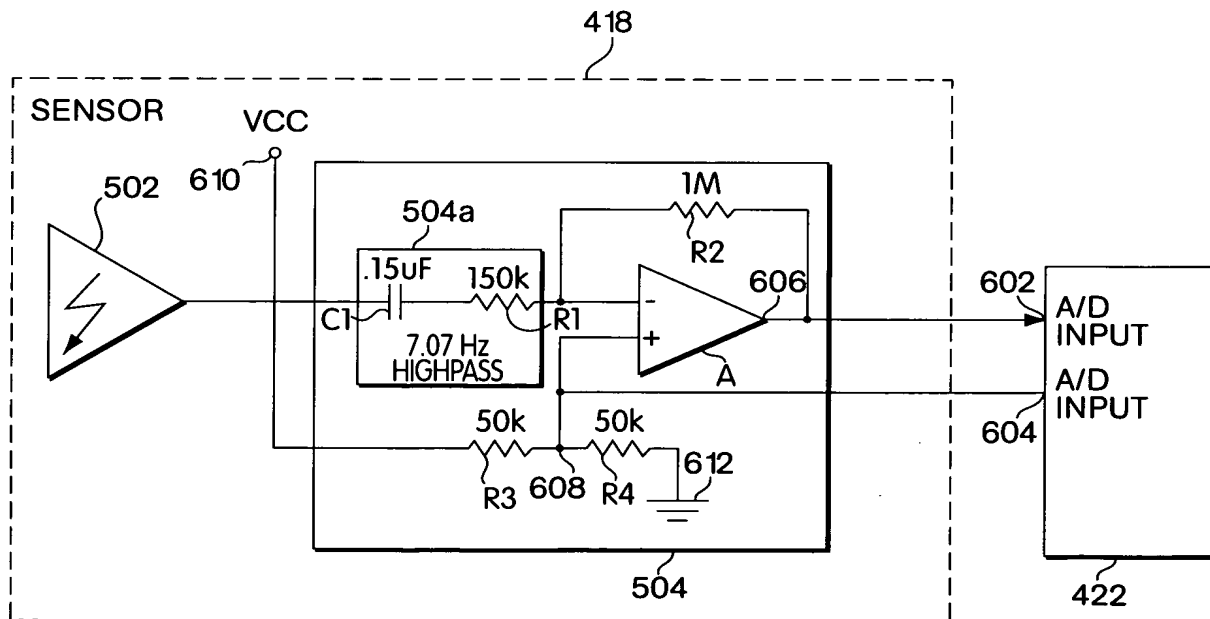


Fig. 6



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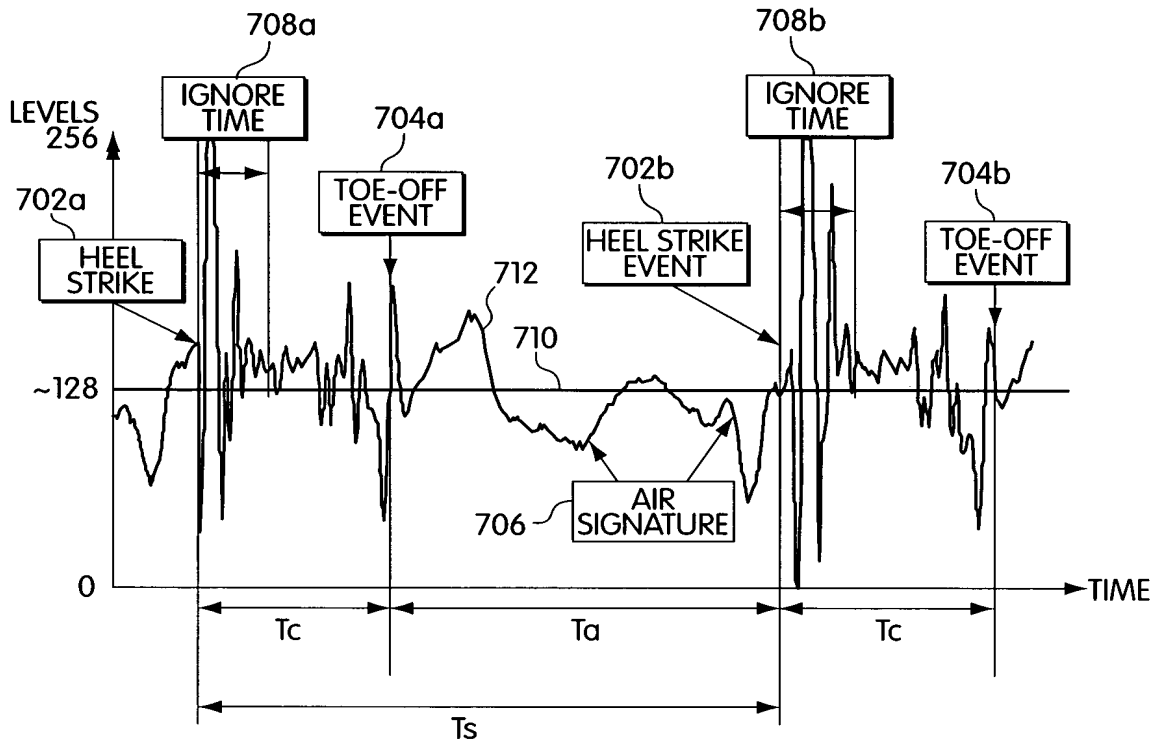


Fig. 7

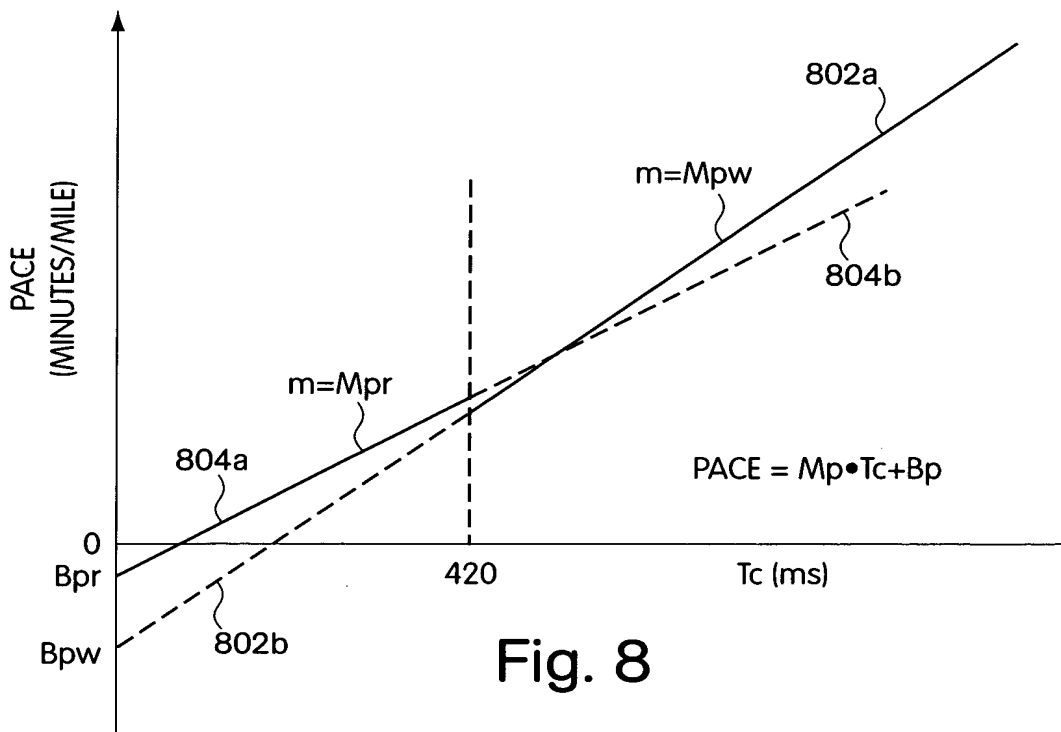
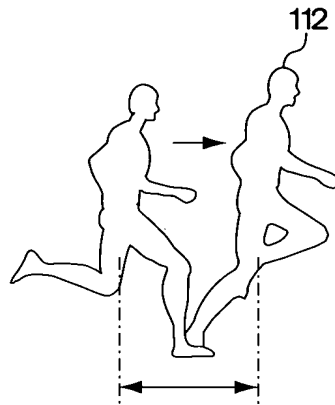


Fig. 8



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$$\text{STEP LENGTH (L}_s\text{)} = T_c \cdot \text{SPEED}$$

Fig. 9

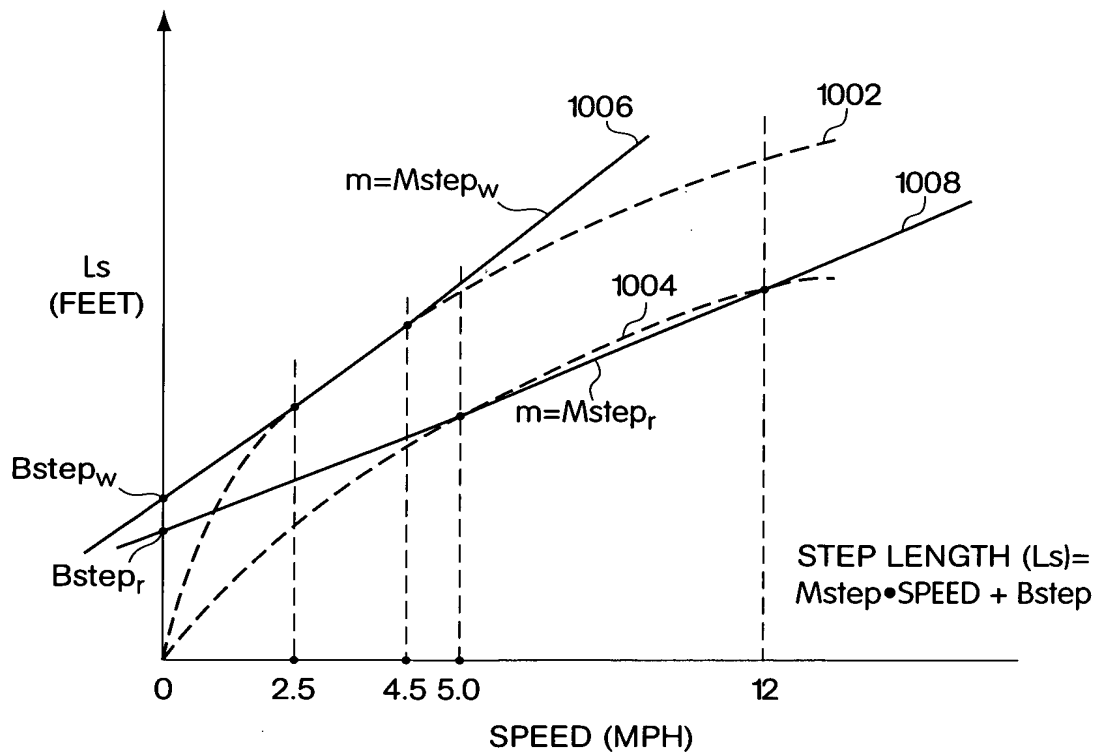


Fig. 10





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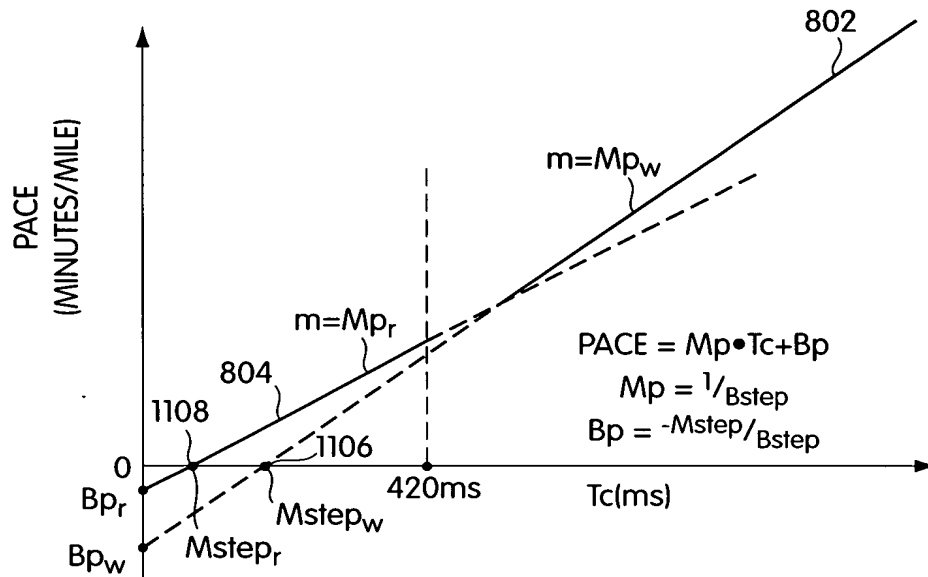


Fig. 11

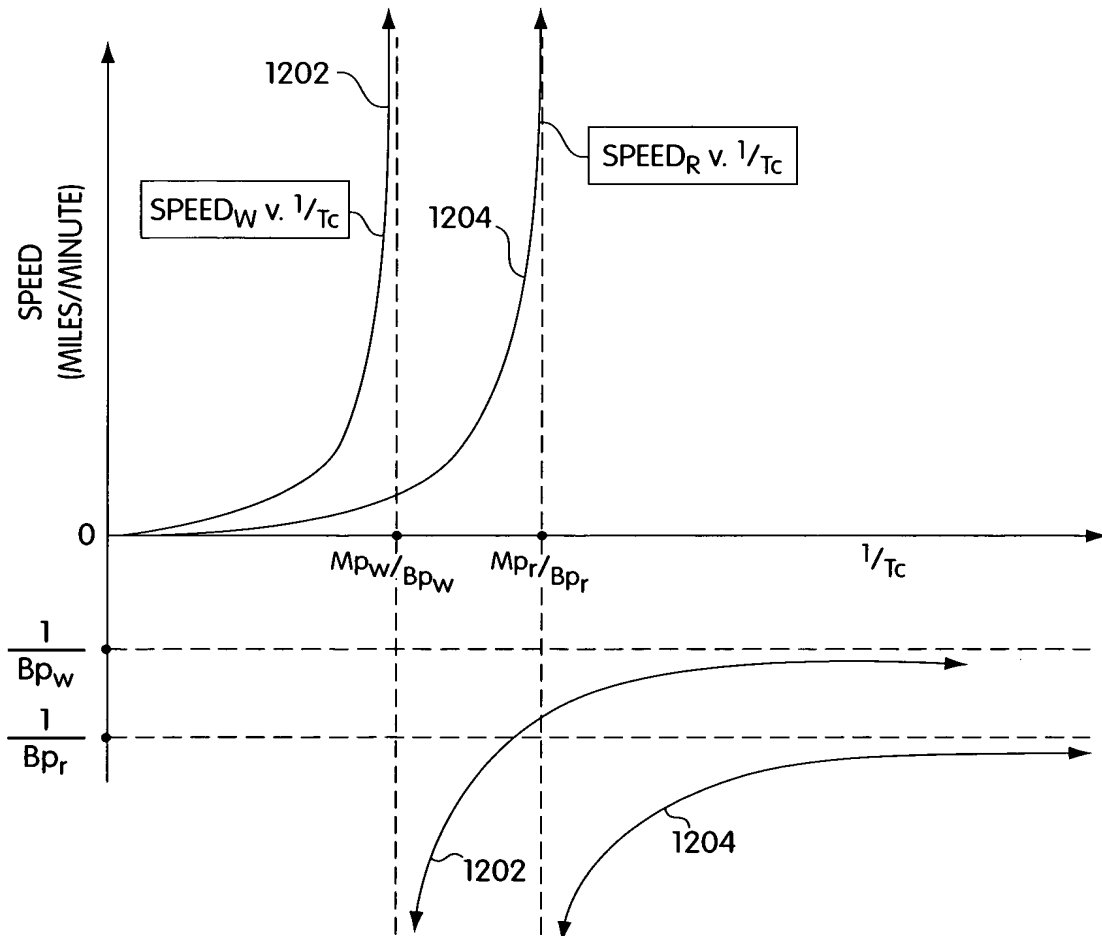
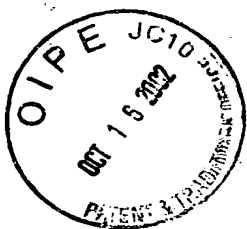


Fig. 12



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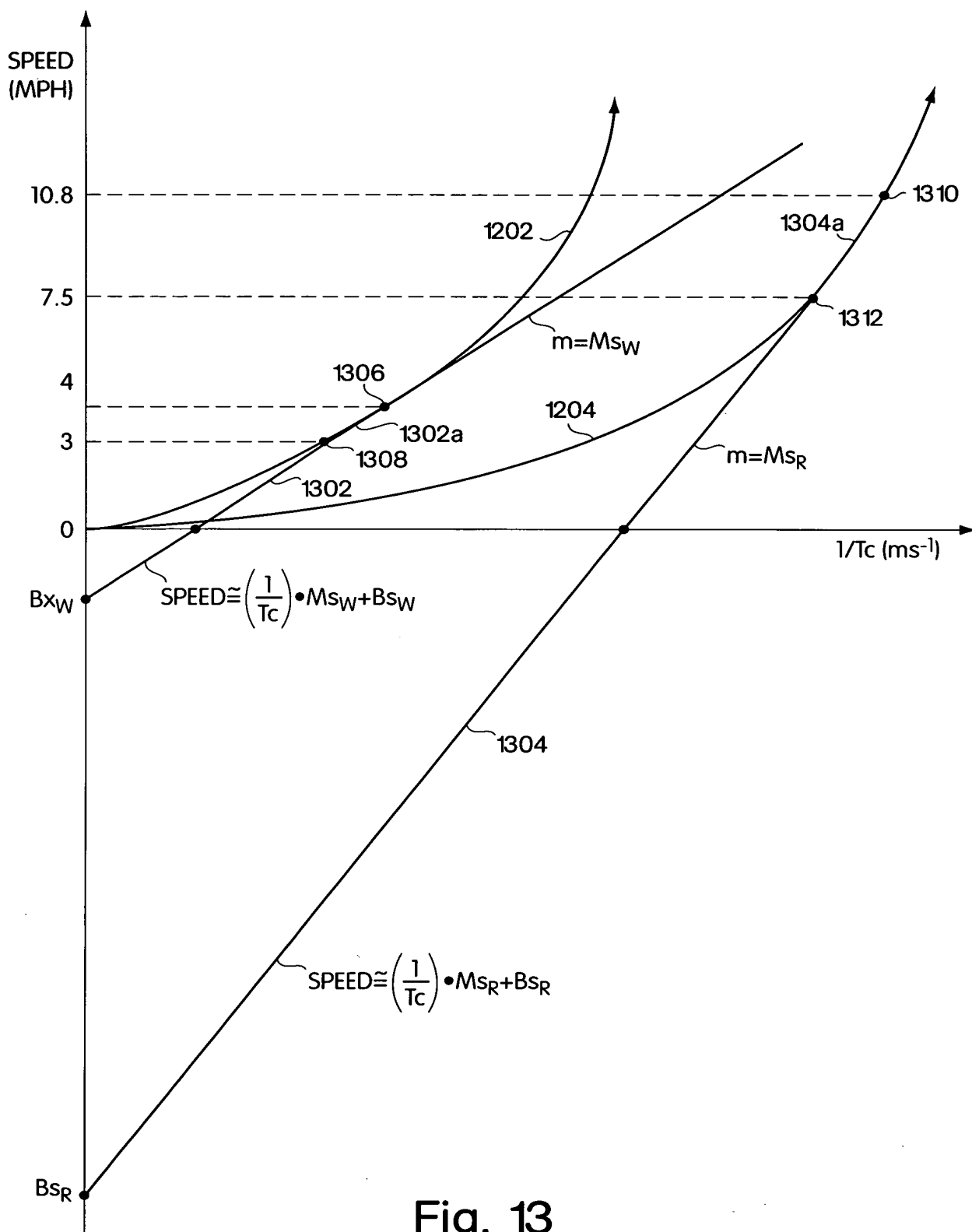
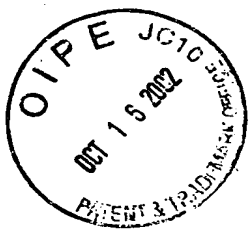


Fig. 13



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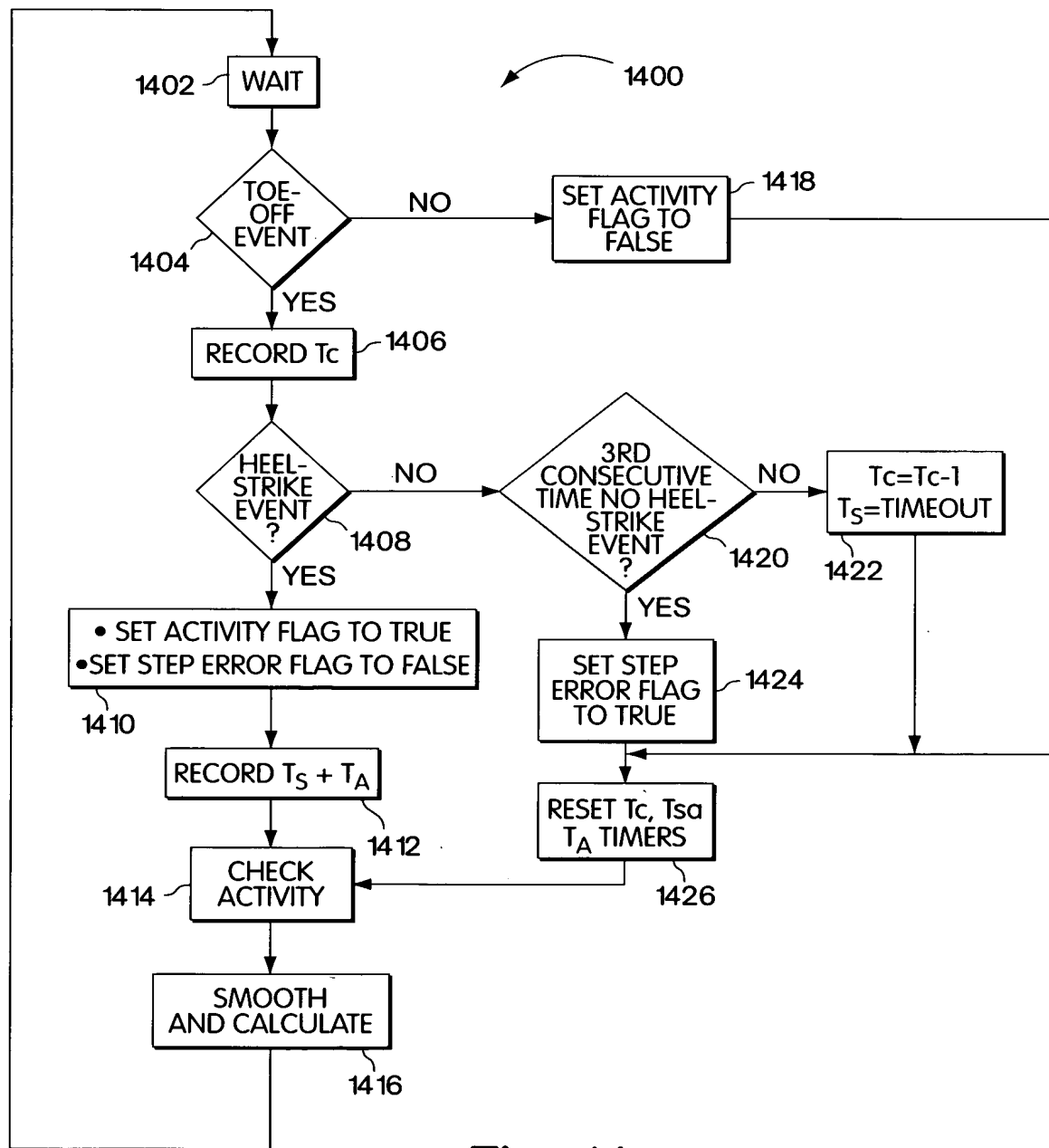
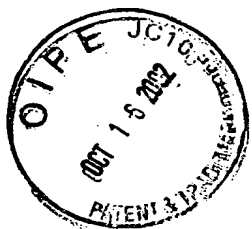


Fig. 14



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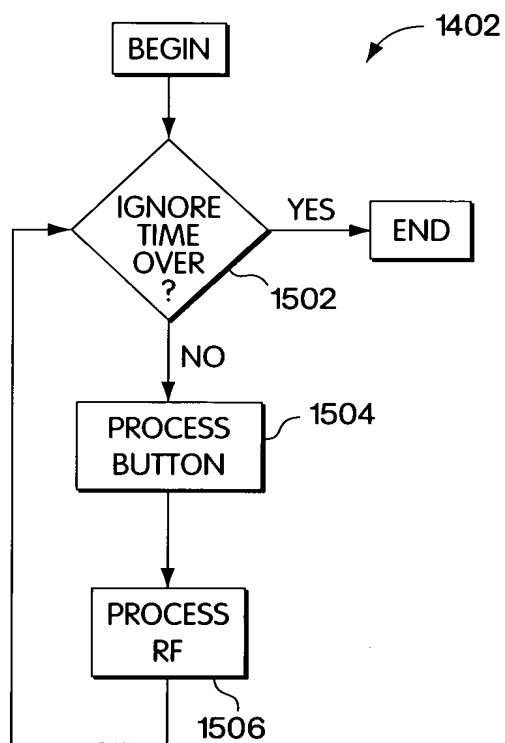
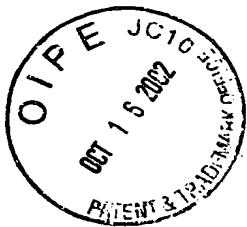


Fig. 15



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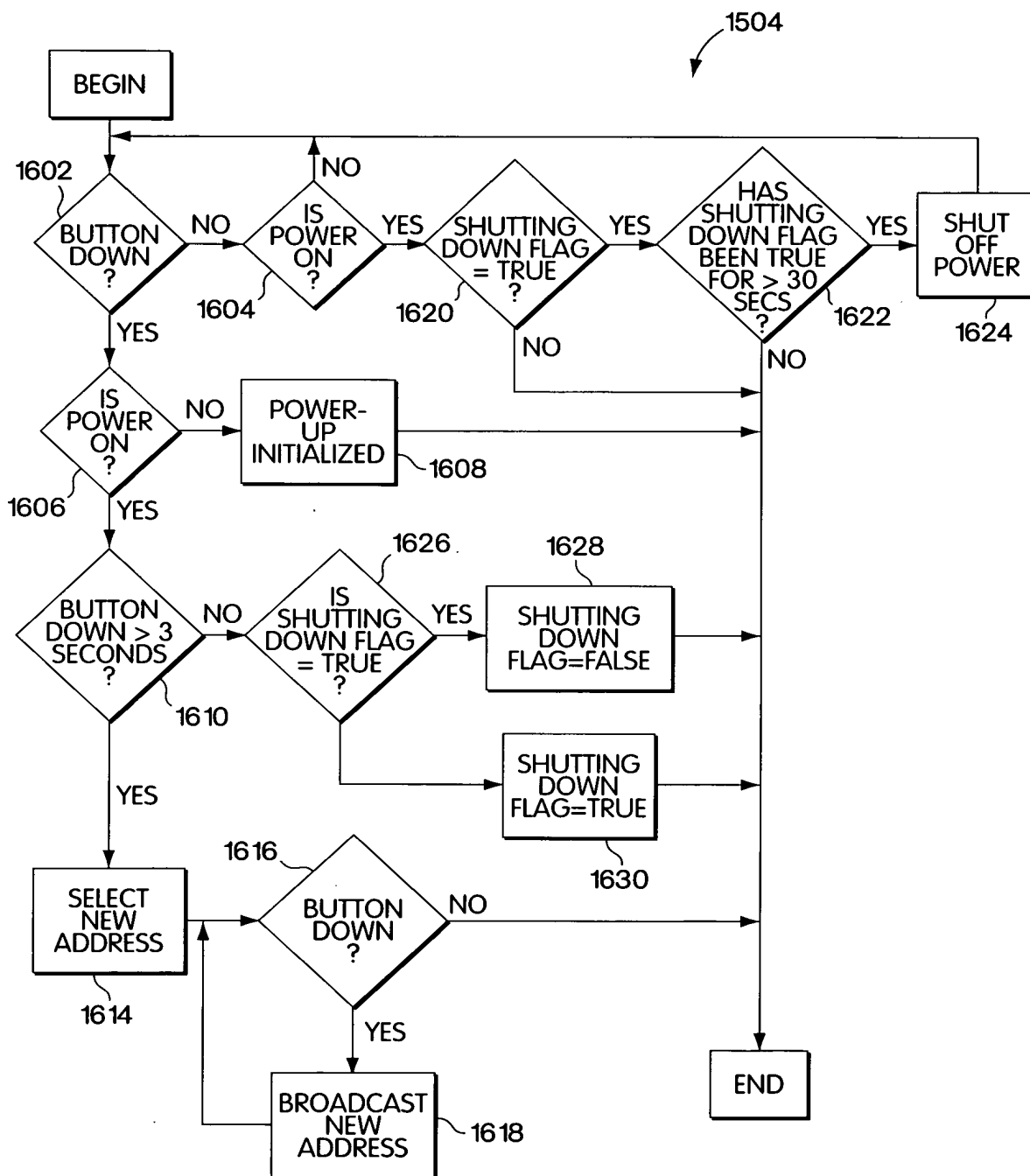
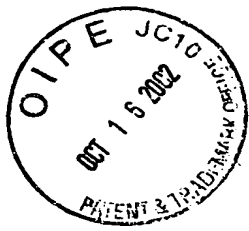


Fig. 16



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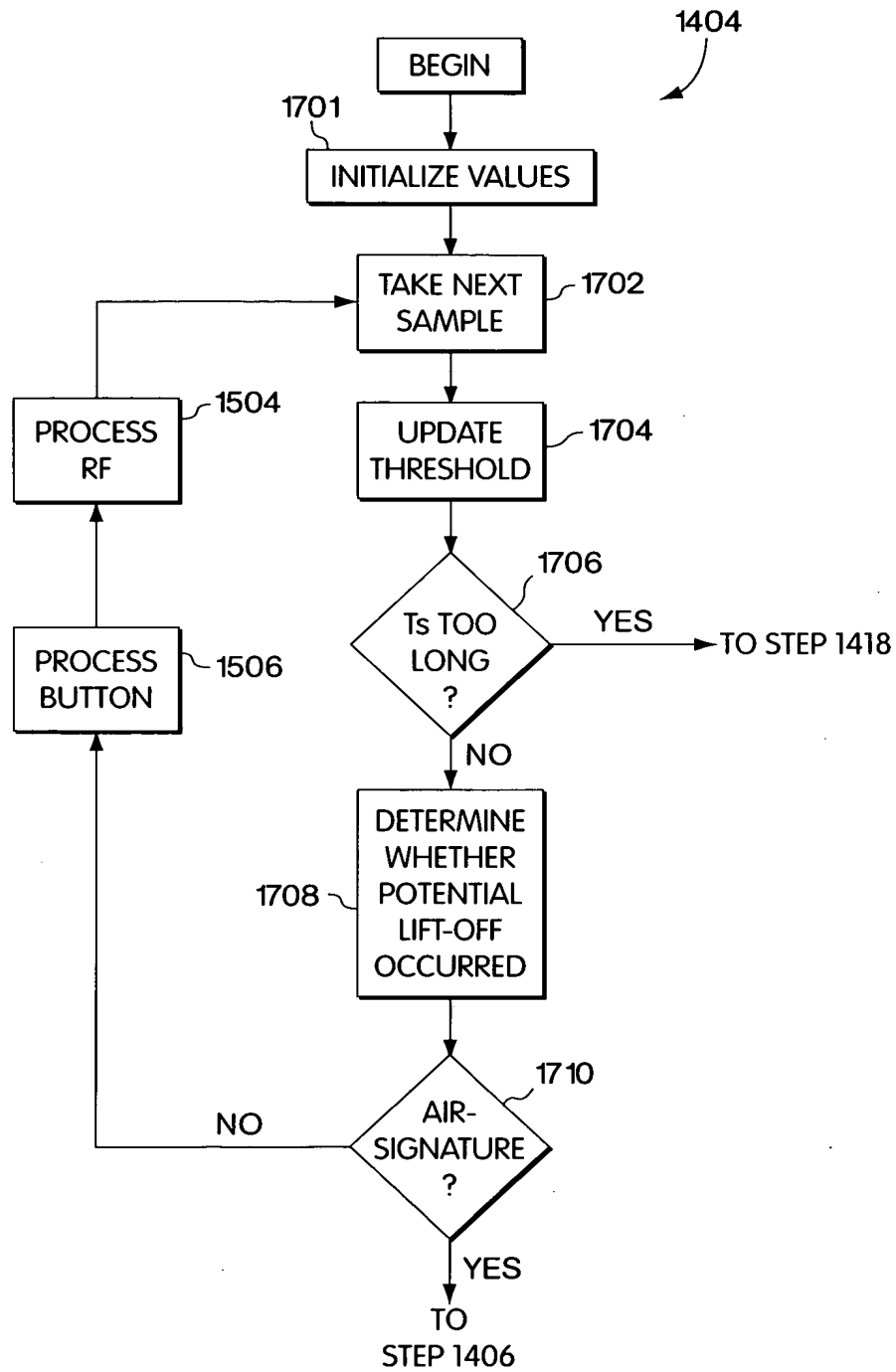


Fig. 17

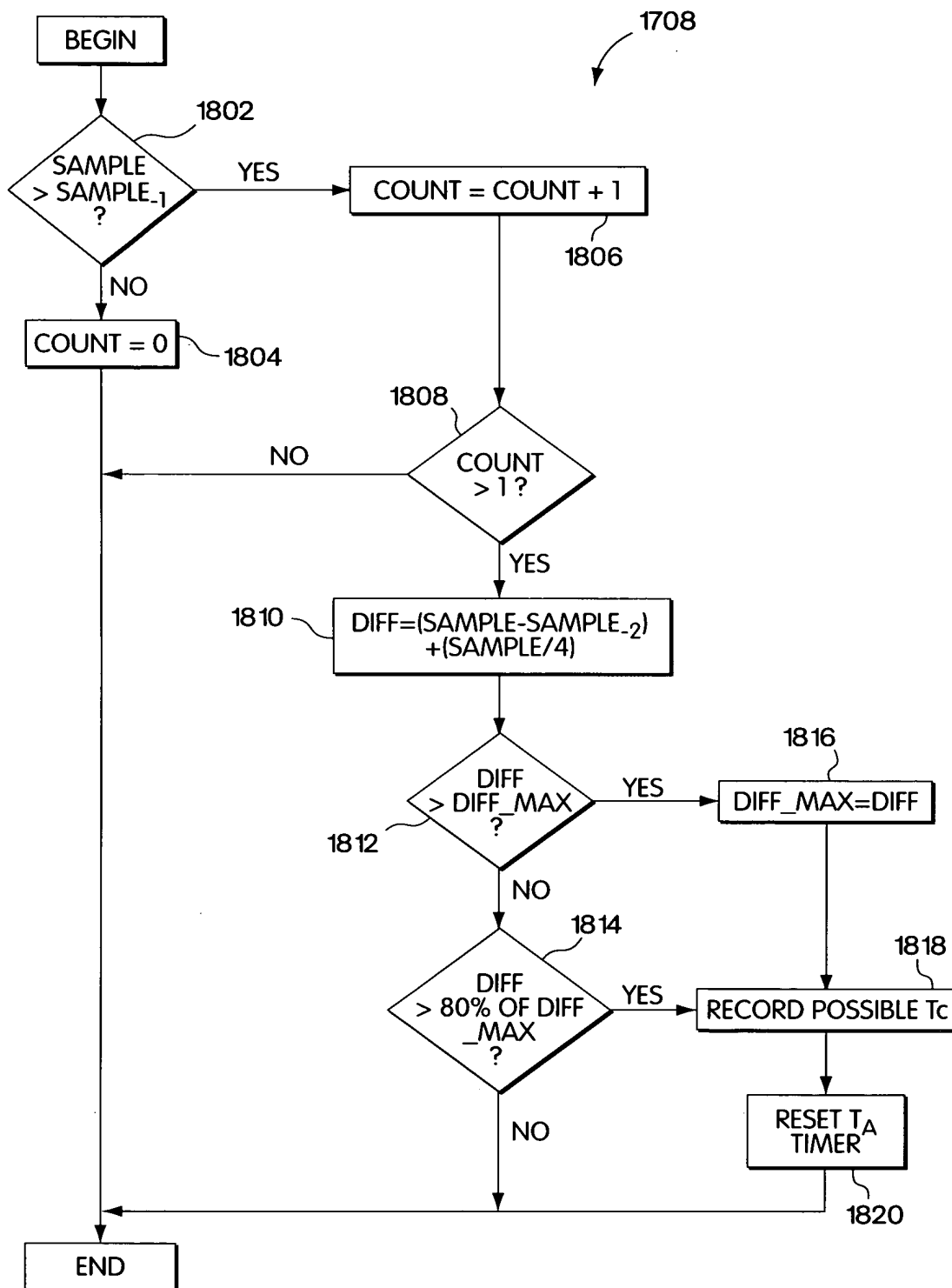
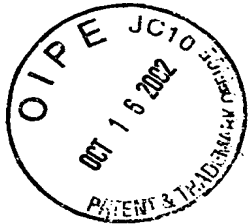
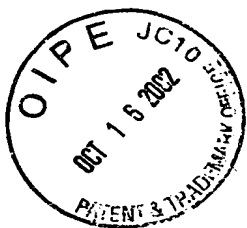


Fig. 18



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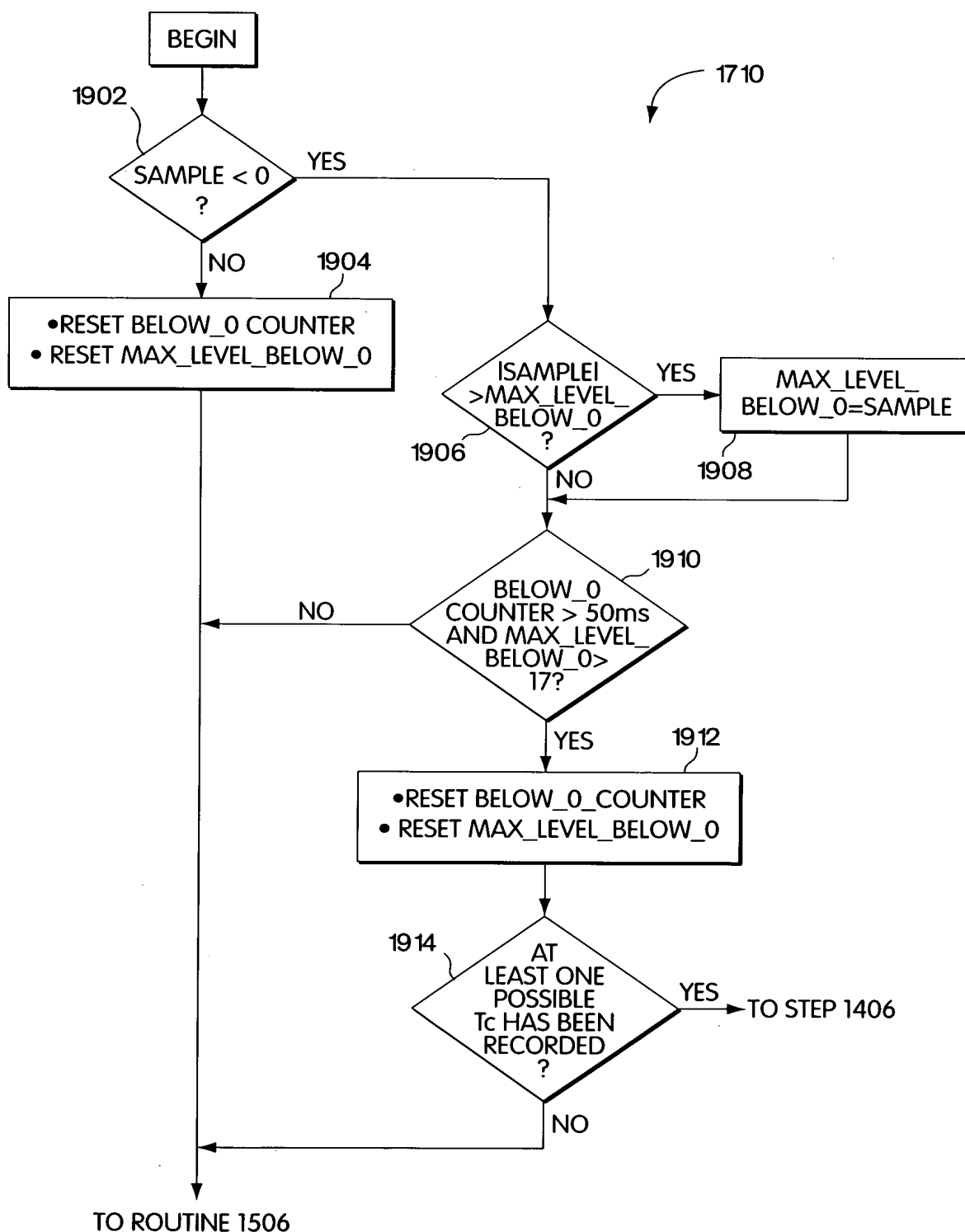
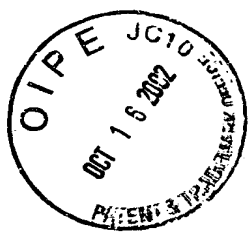


Fig. 19





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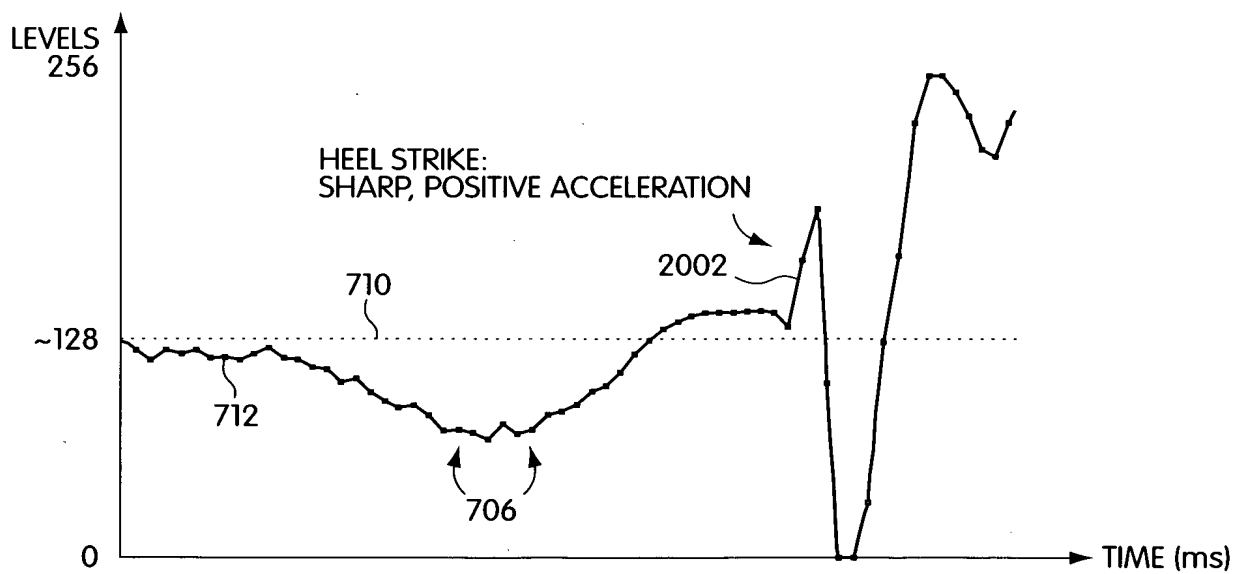


Fig. 20



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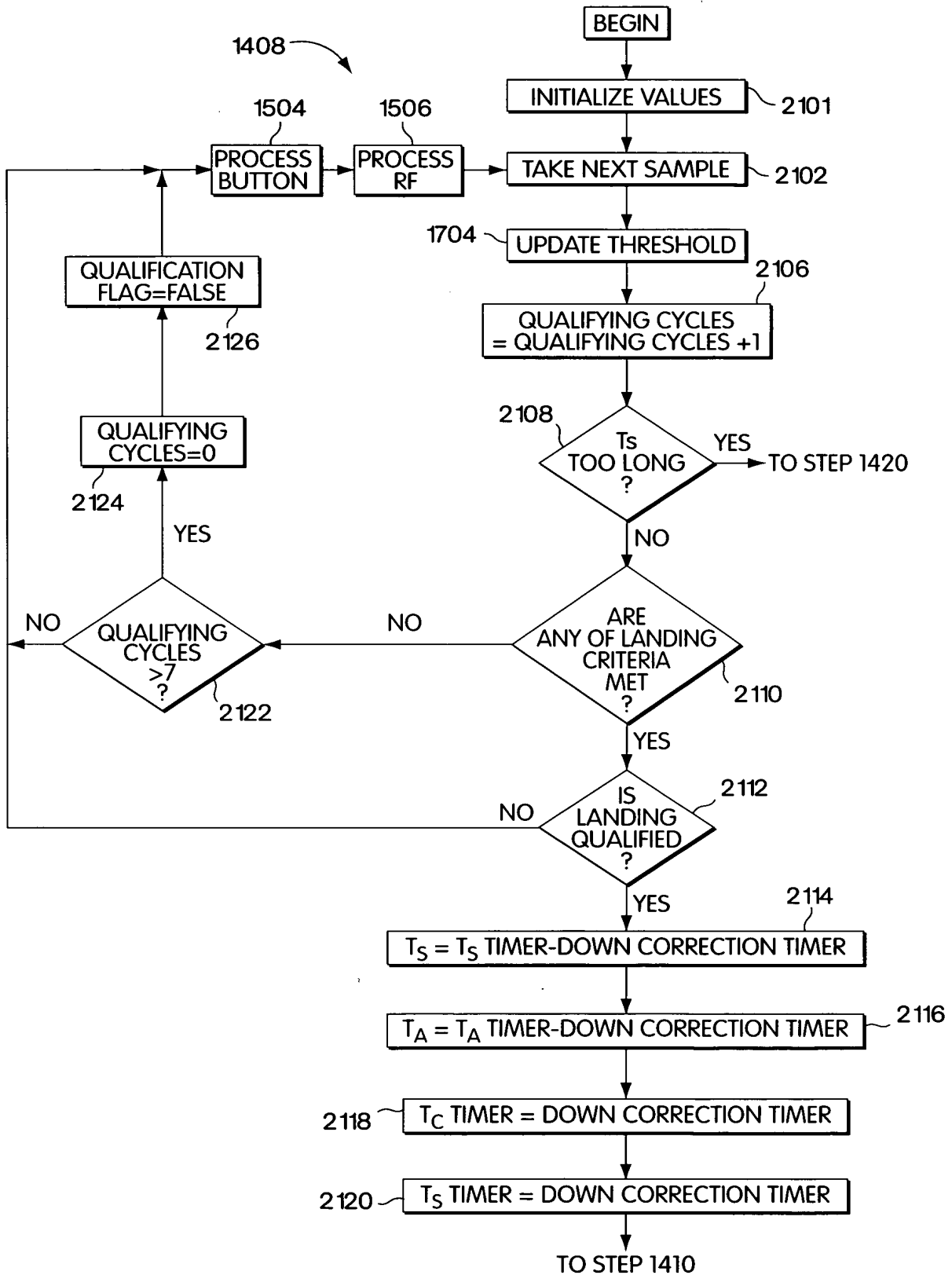
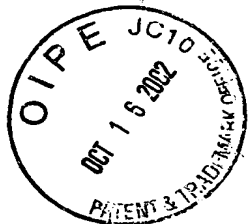
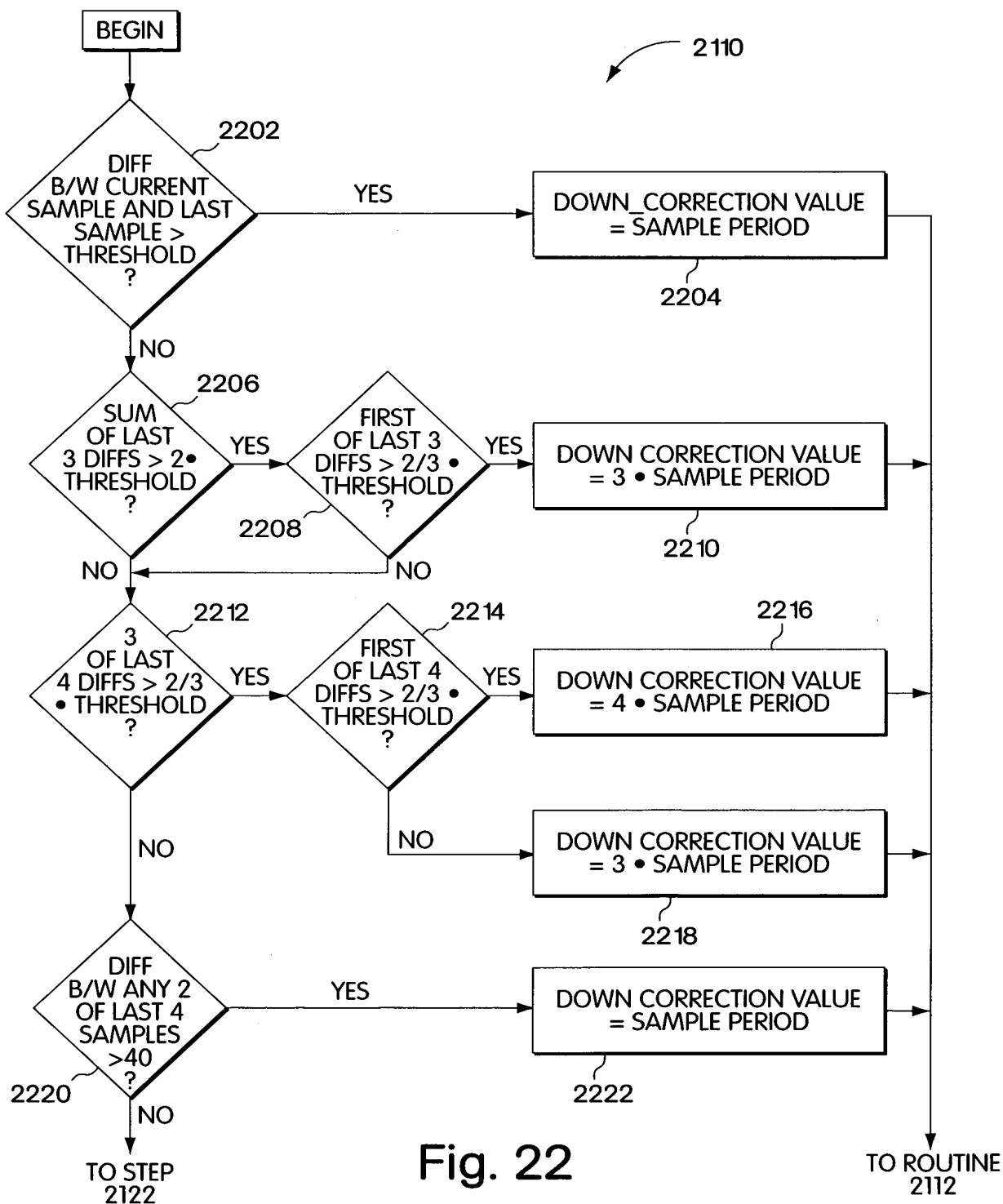
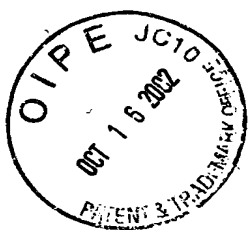


Fig. 21



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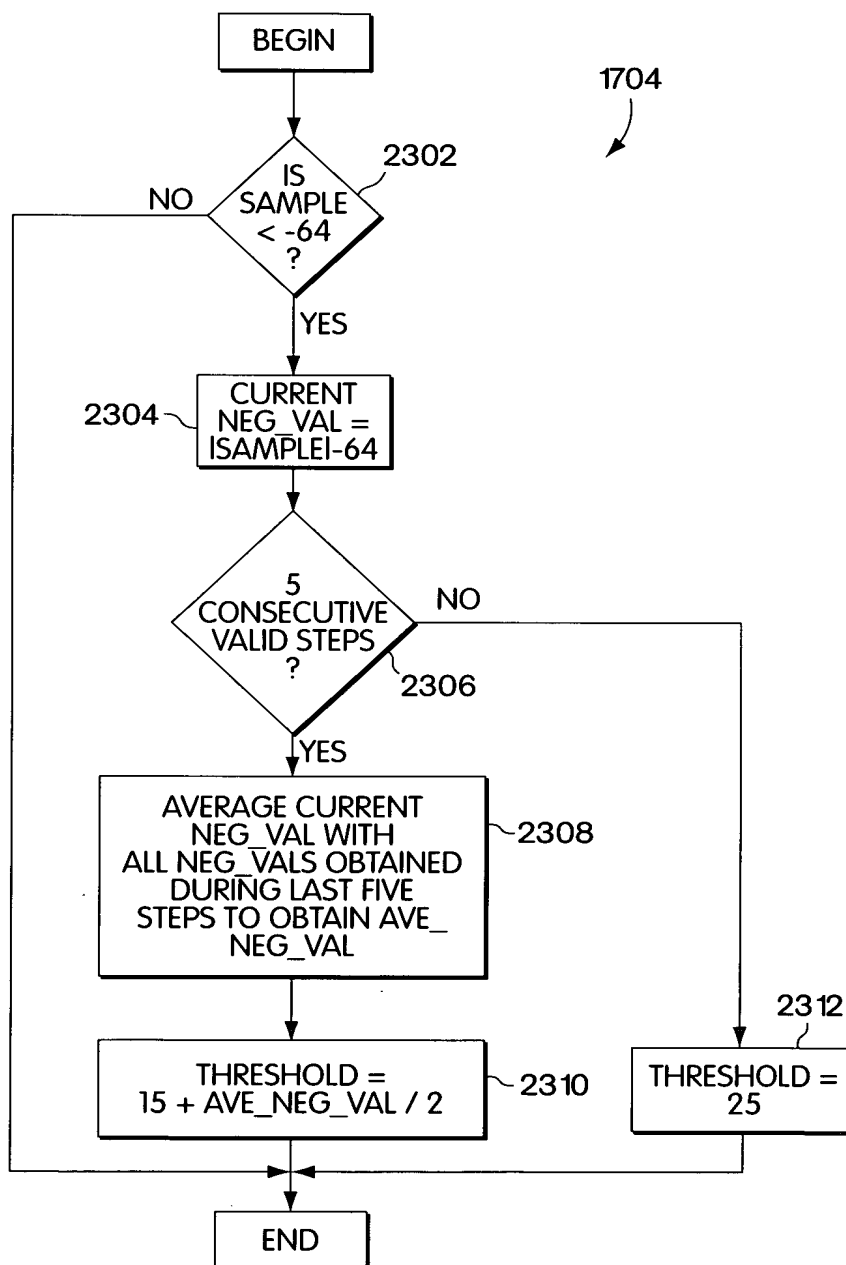


Fig. 23

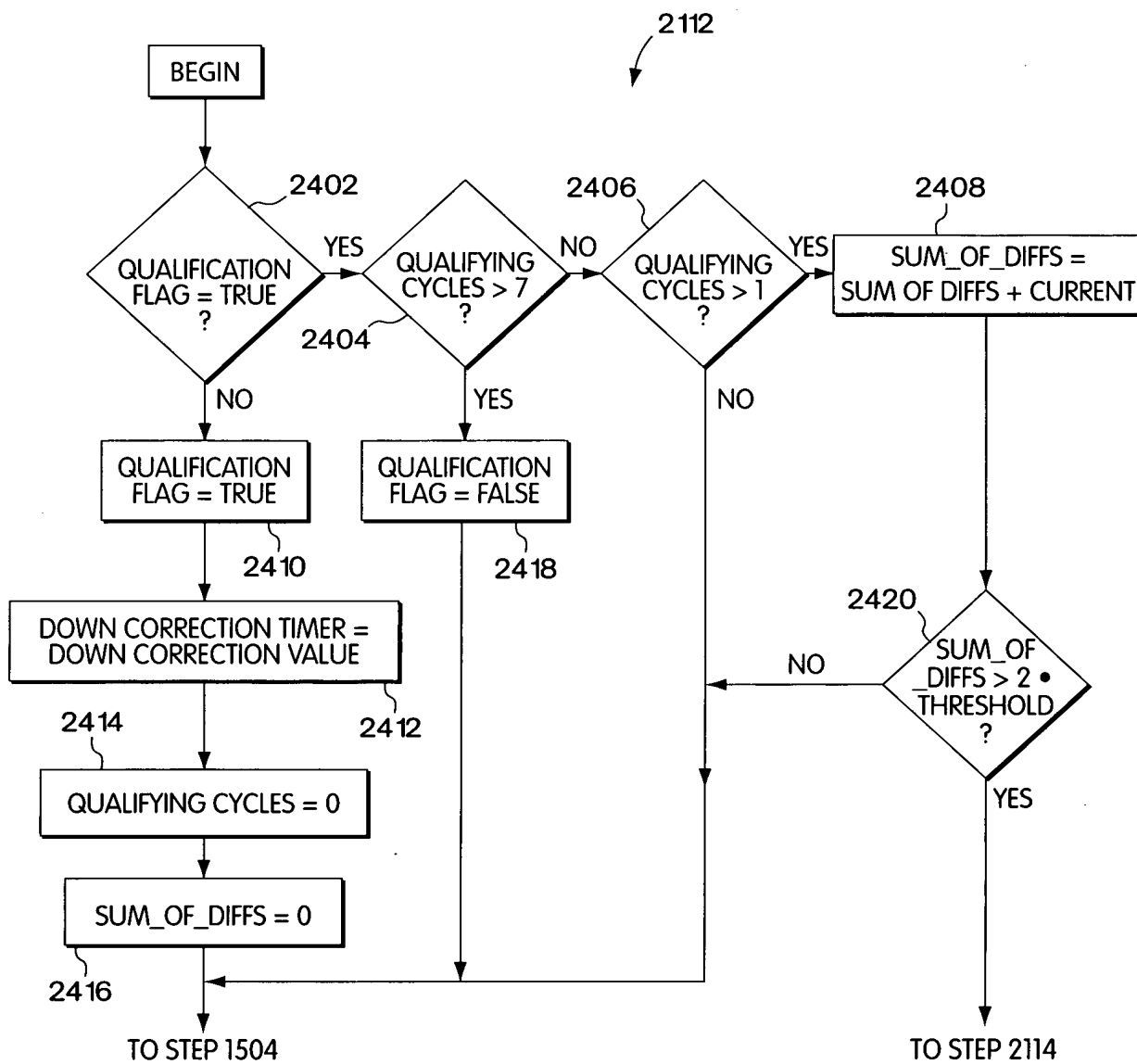


Fig. 24

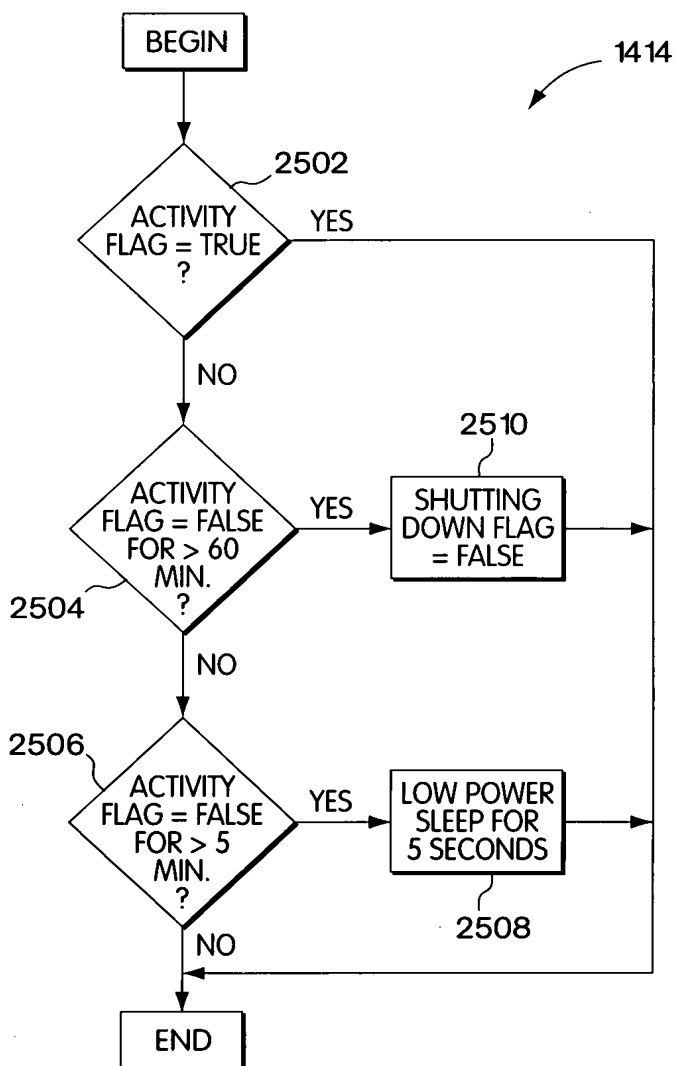
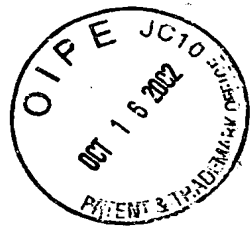


Fig. 25



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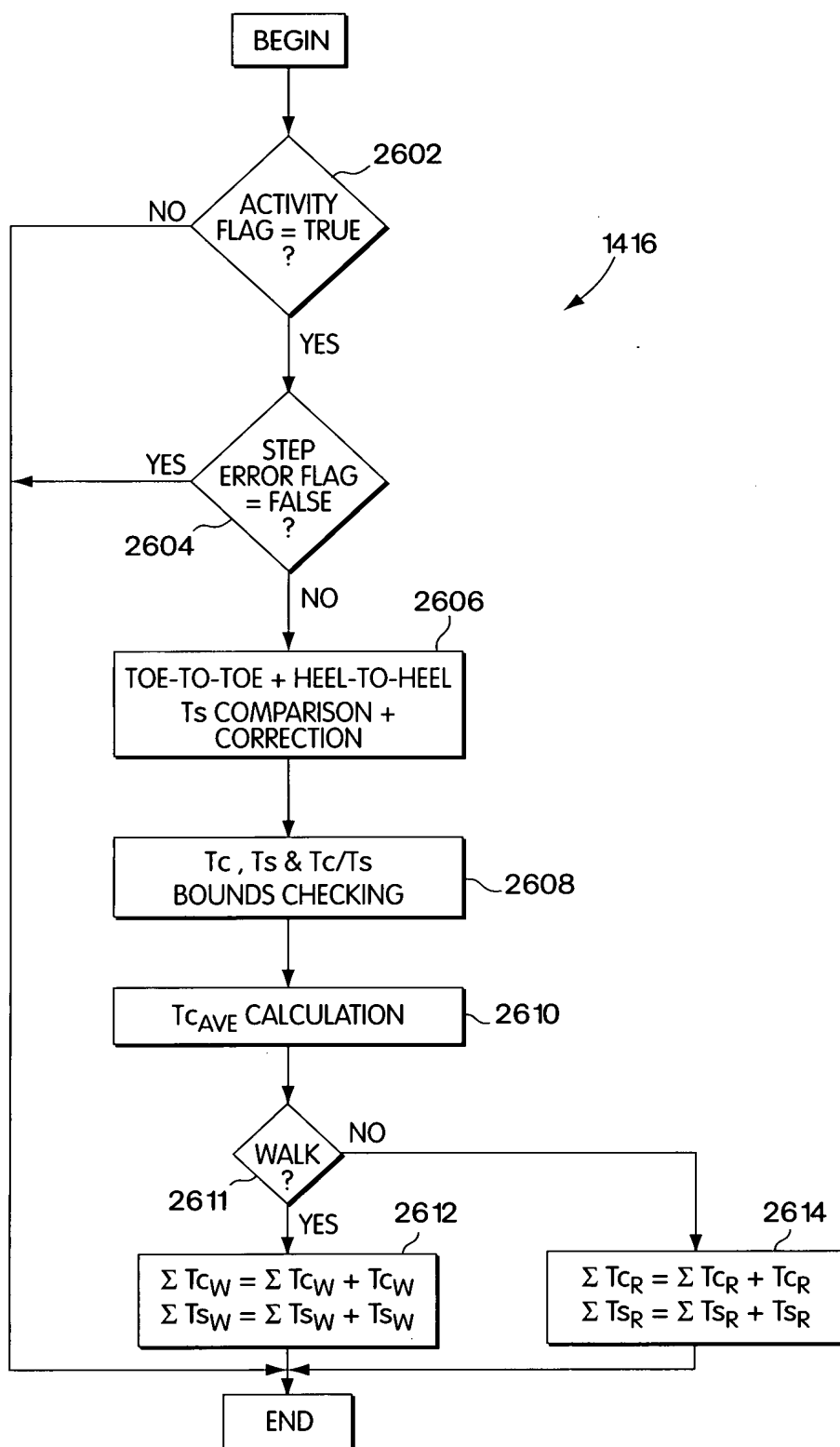
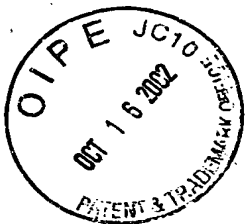


Fig. 26



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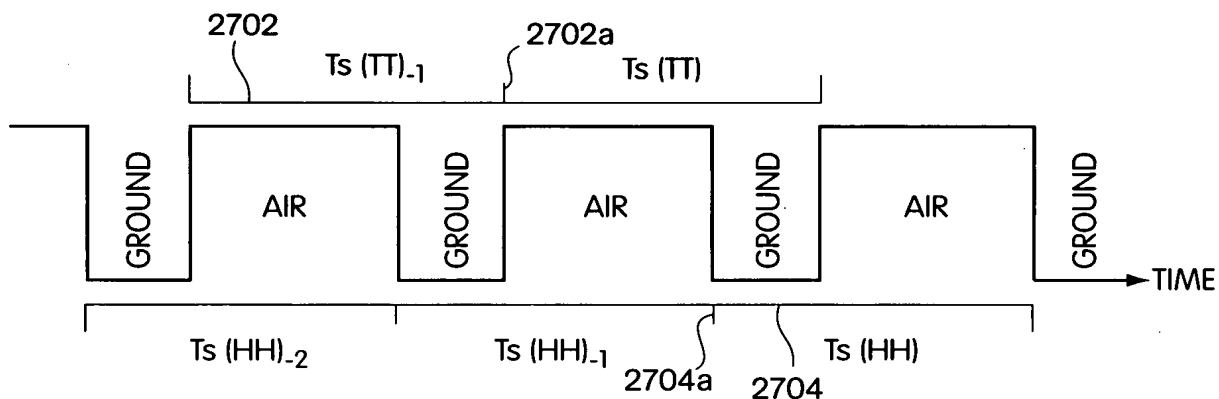


Fig. 27

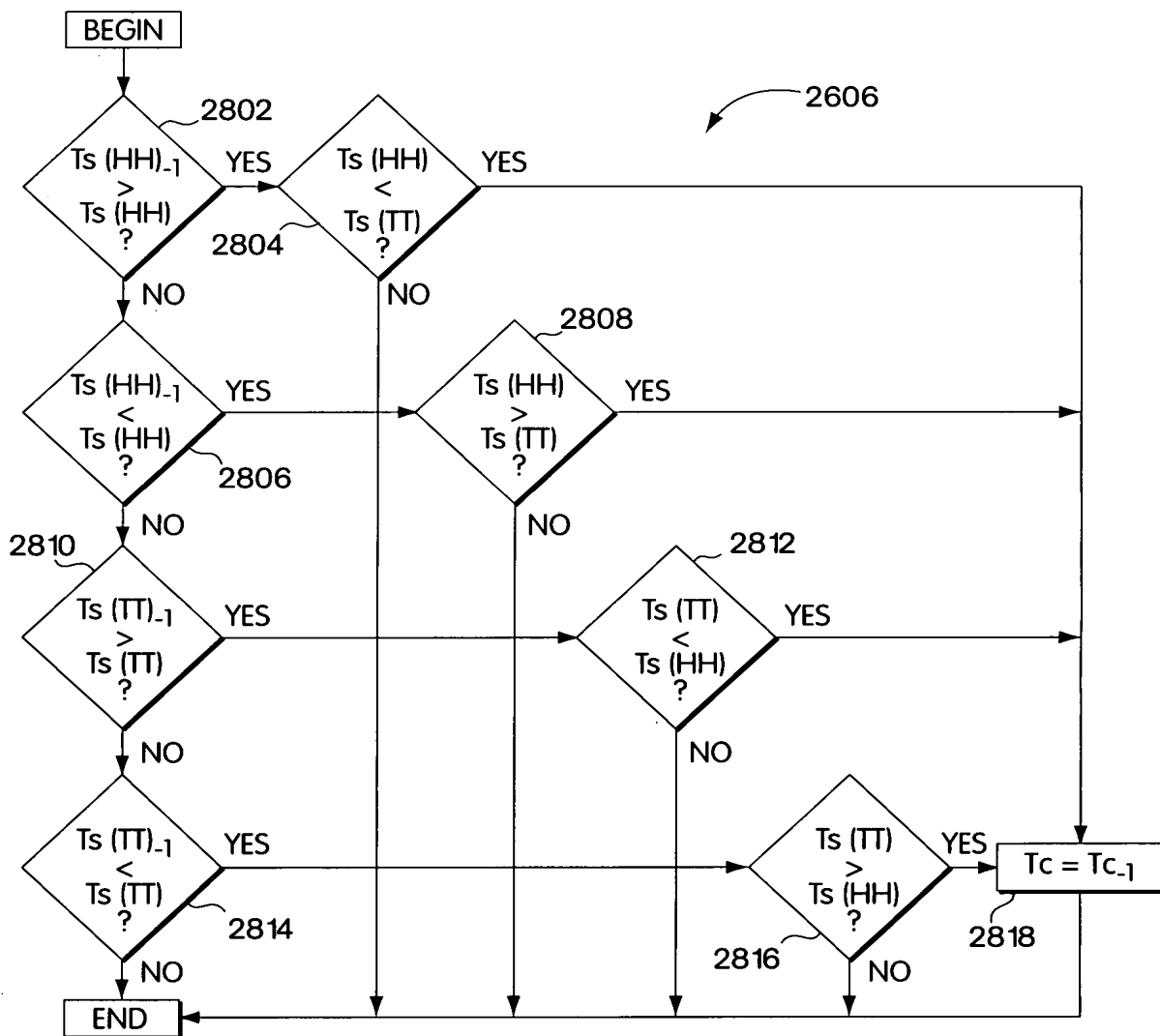


Fig. 28



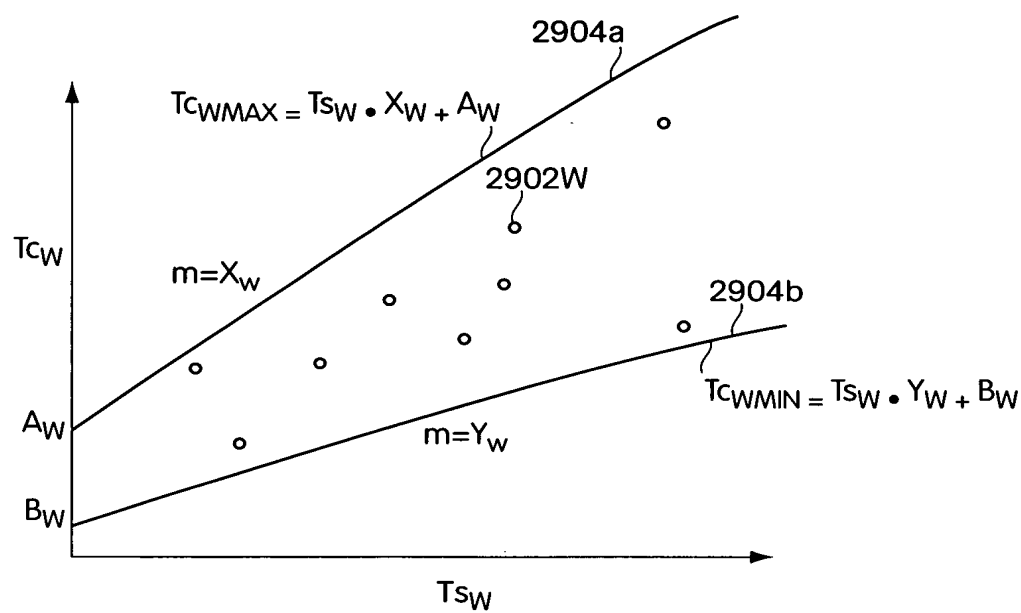


Fig. 29A

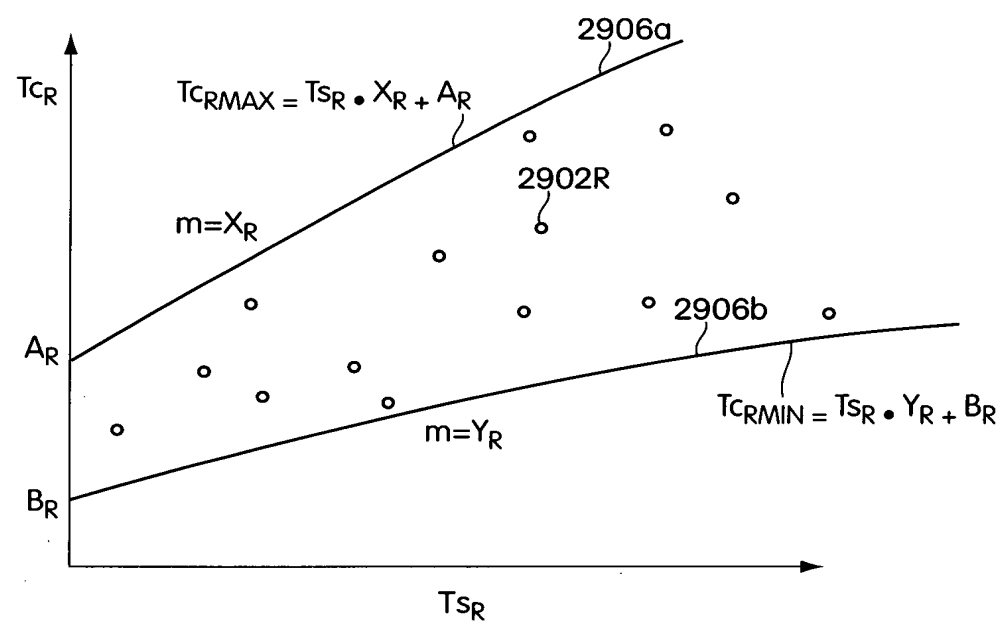


Fig. 29B

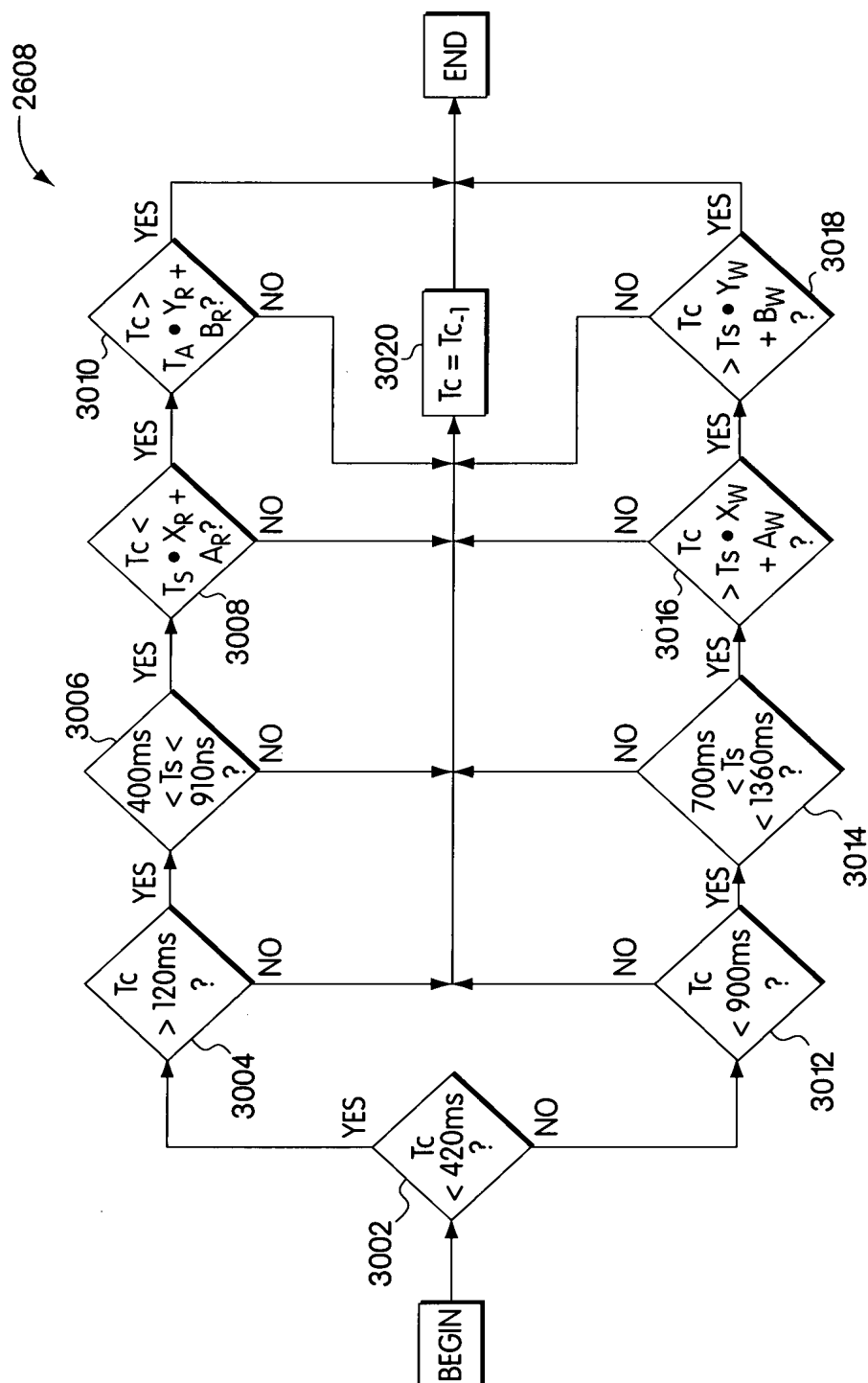
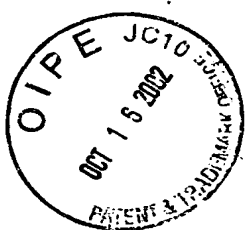


Fig. 30

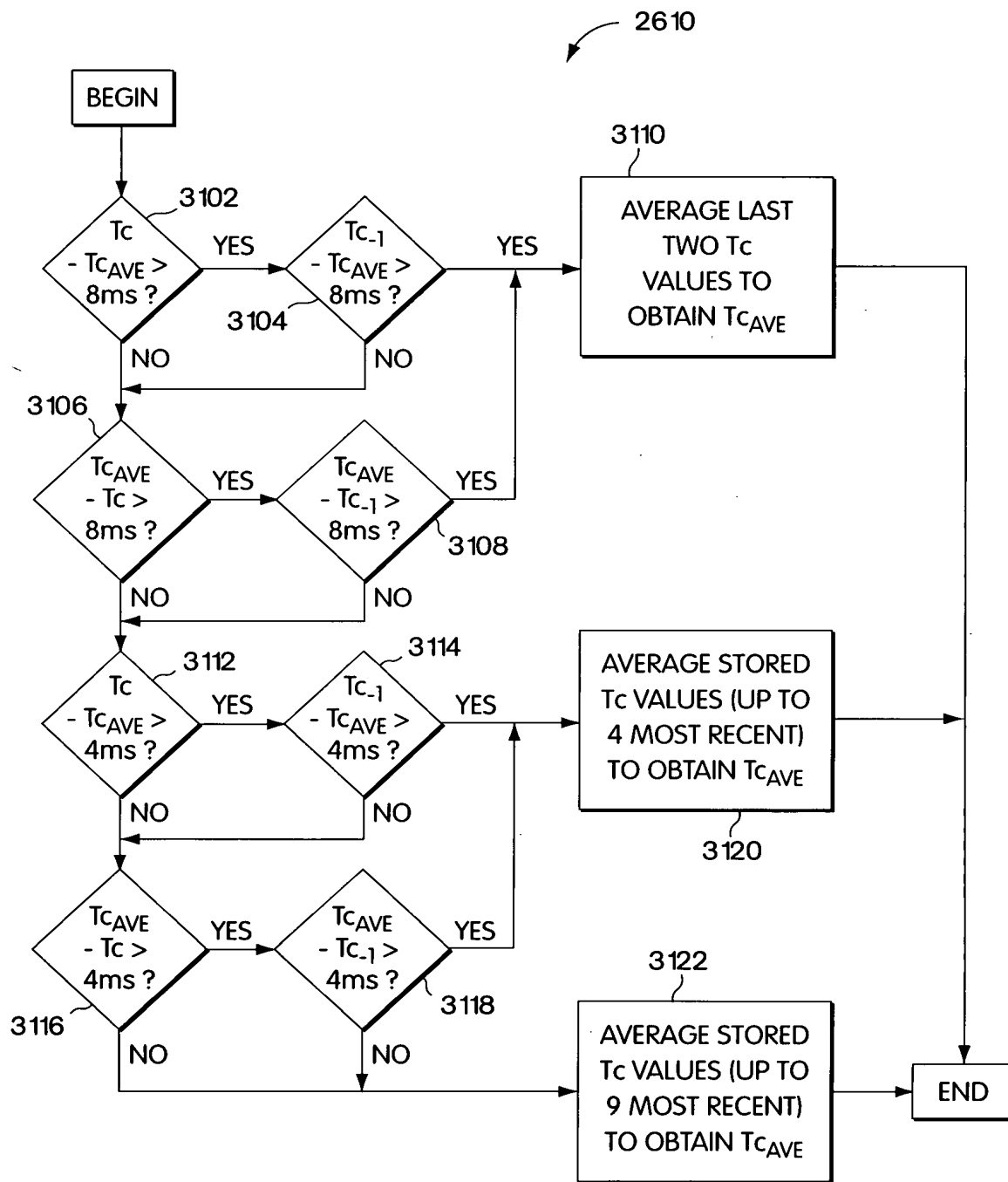


Fig. 31

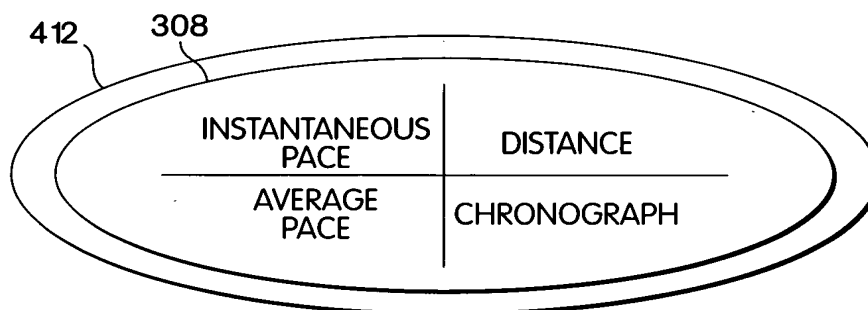


Fig. 32A

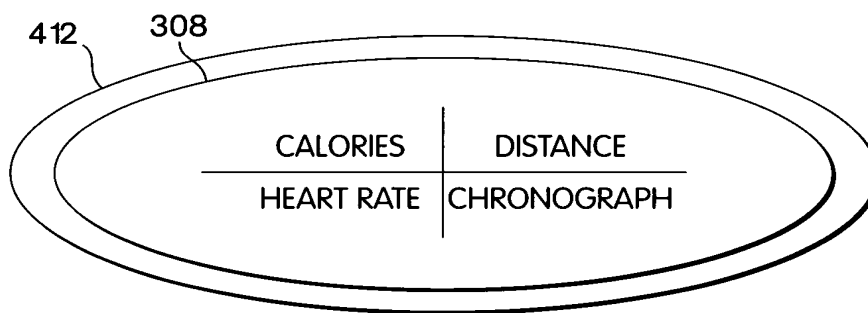


Fig. 32B

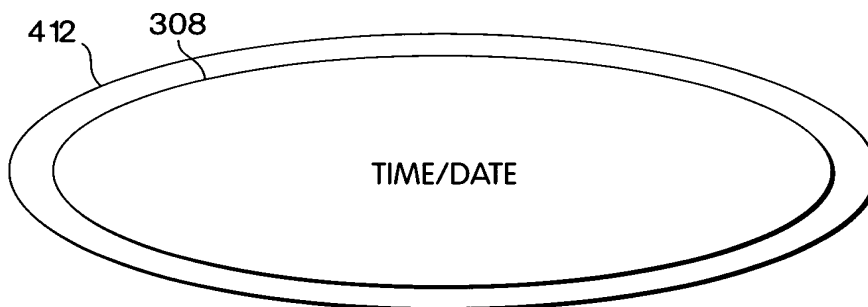


Fig. 32C

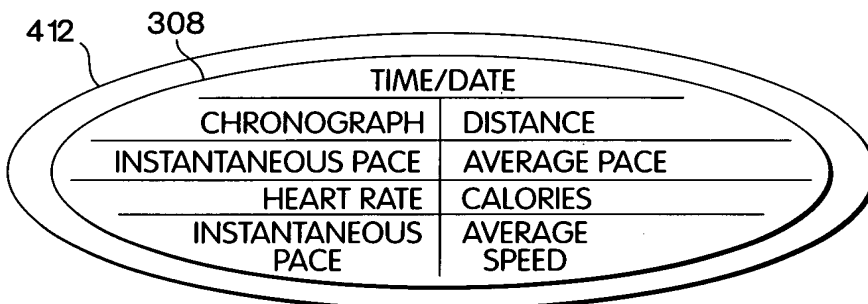


Fig. 32D

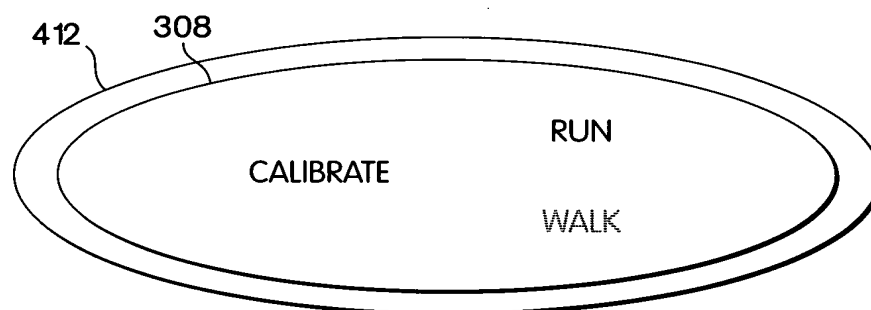
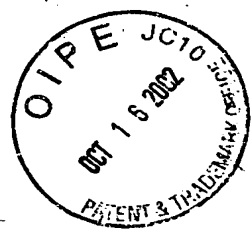


Fig. 32E

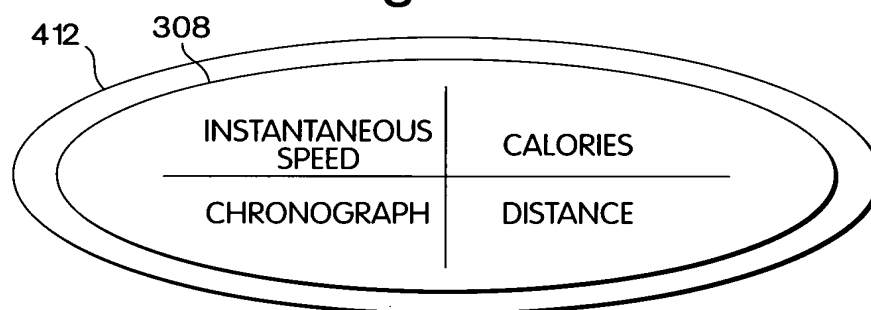


Fig. 32F

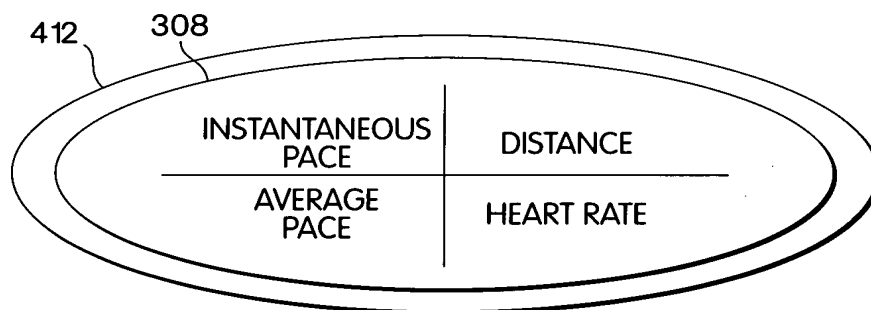


Fig. 32G

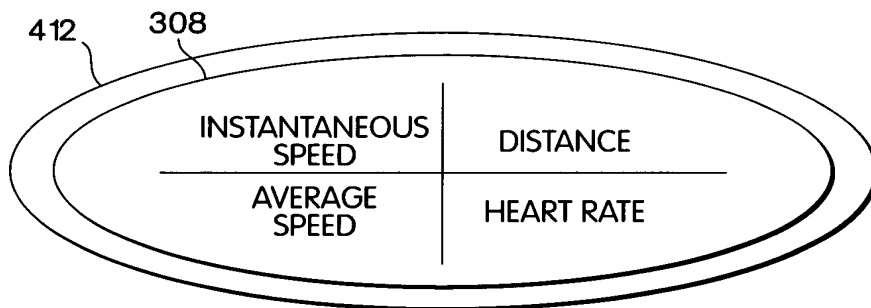
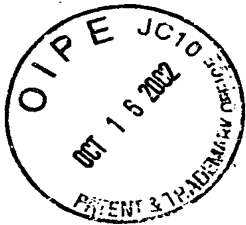


Fig. 32H



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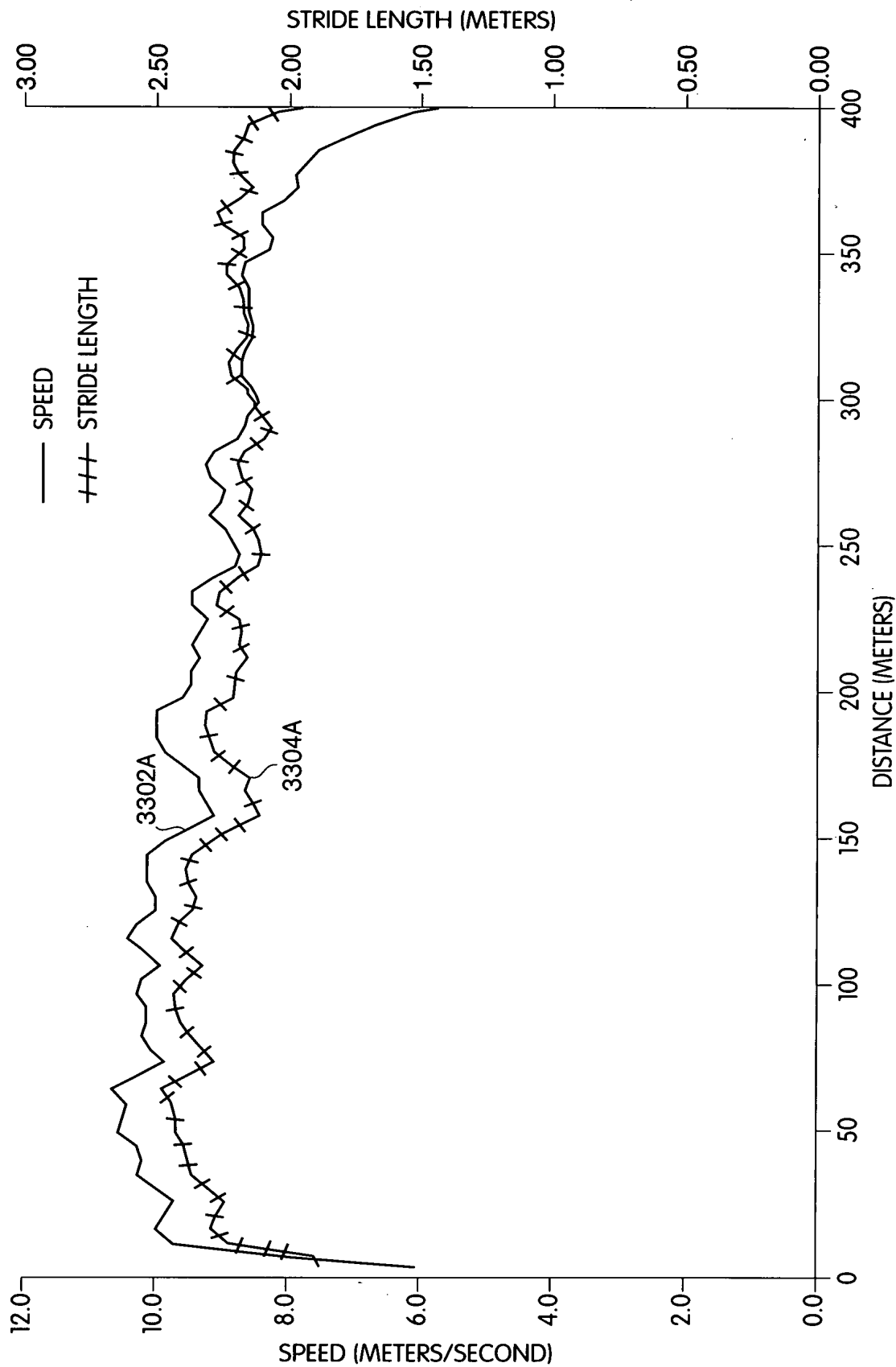
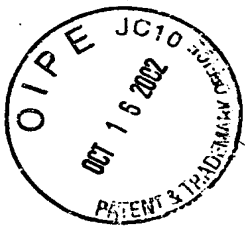


Fig. 33A



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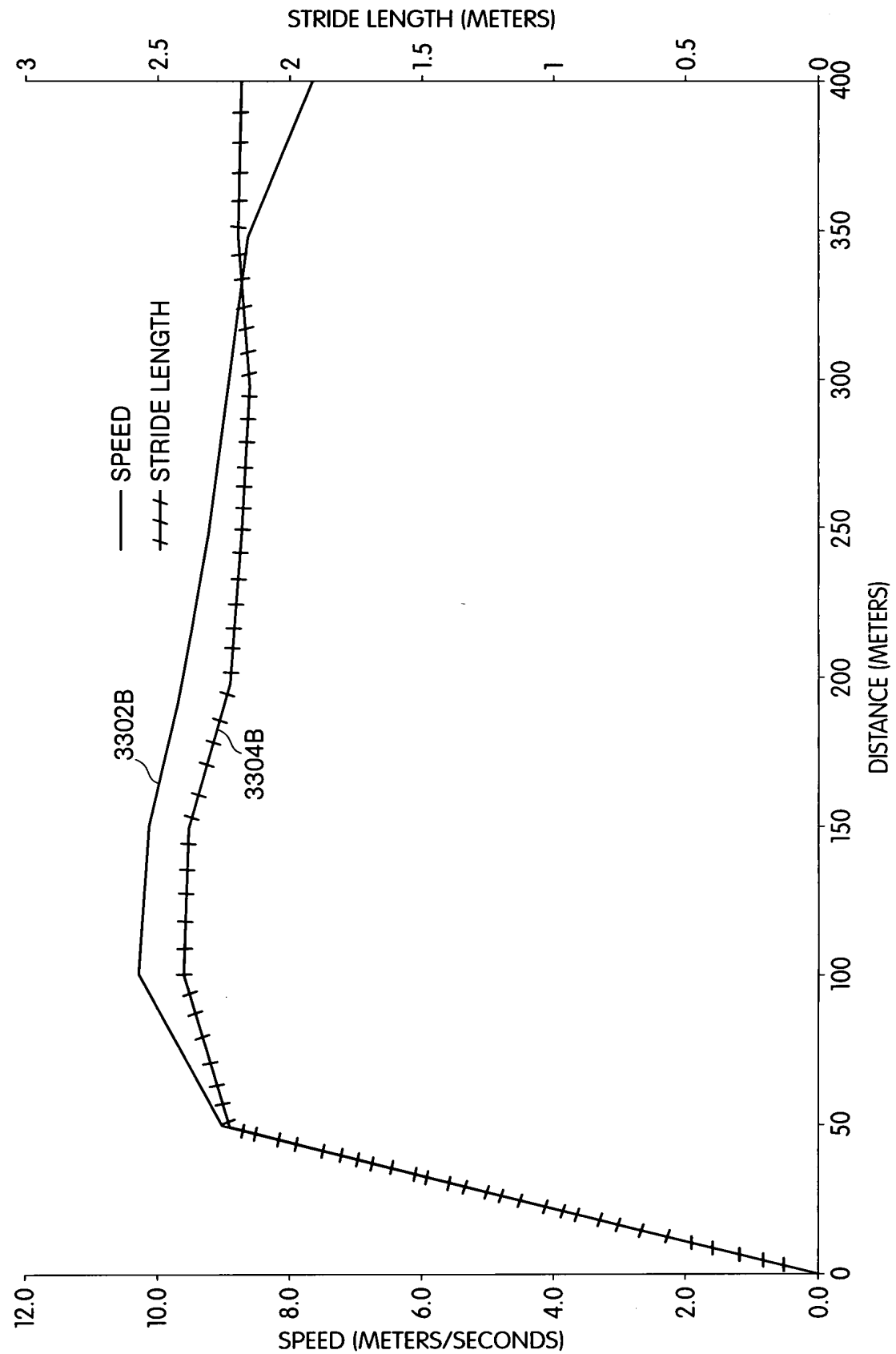
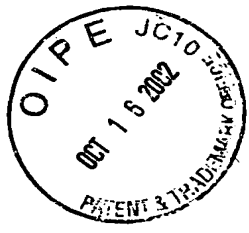


Fig. 33B



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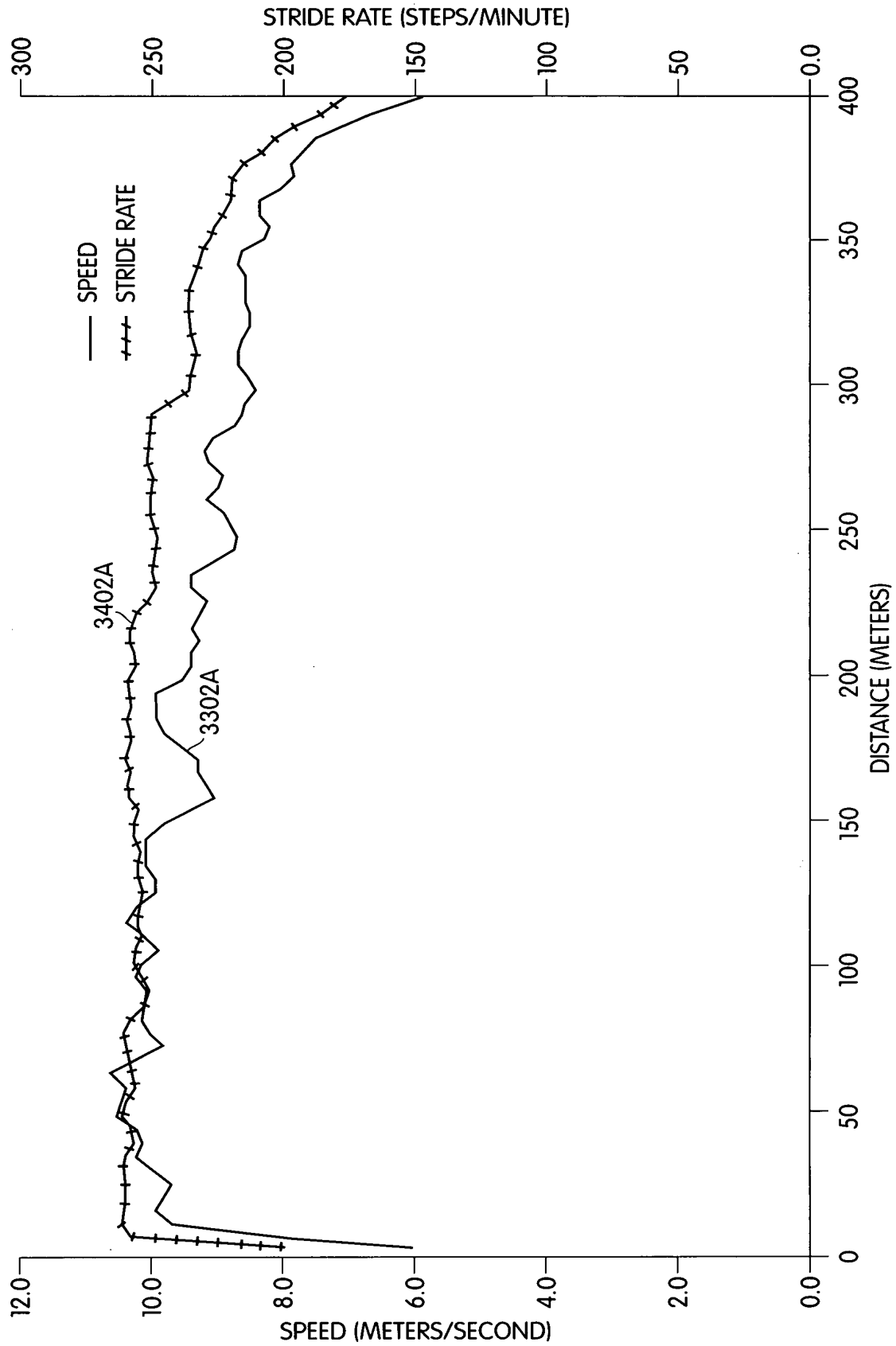
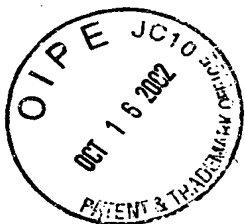


Fig. 34A





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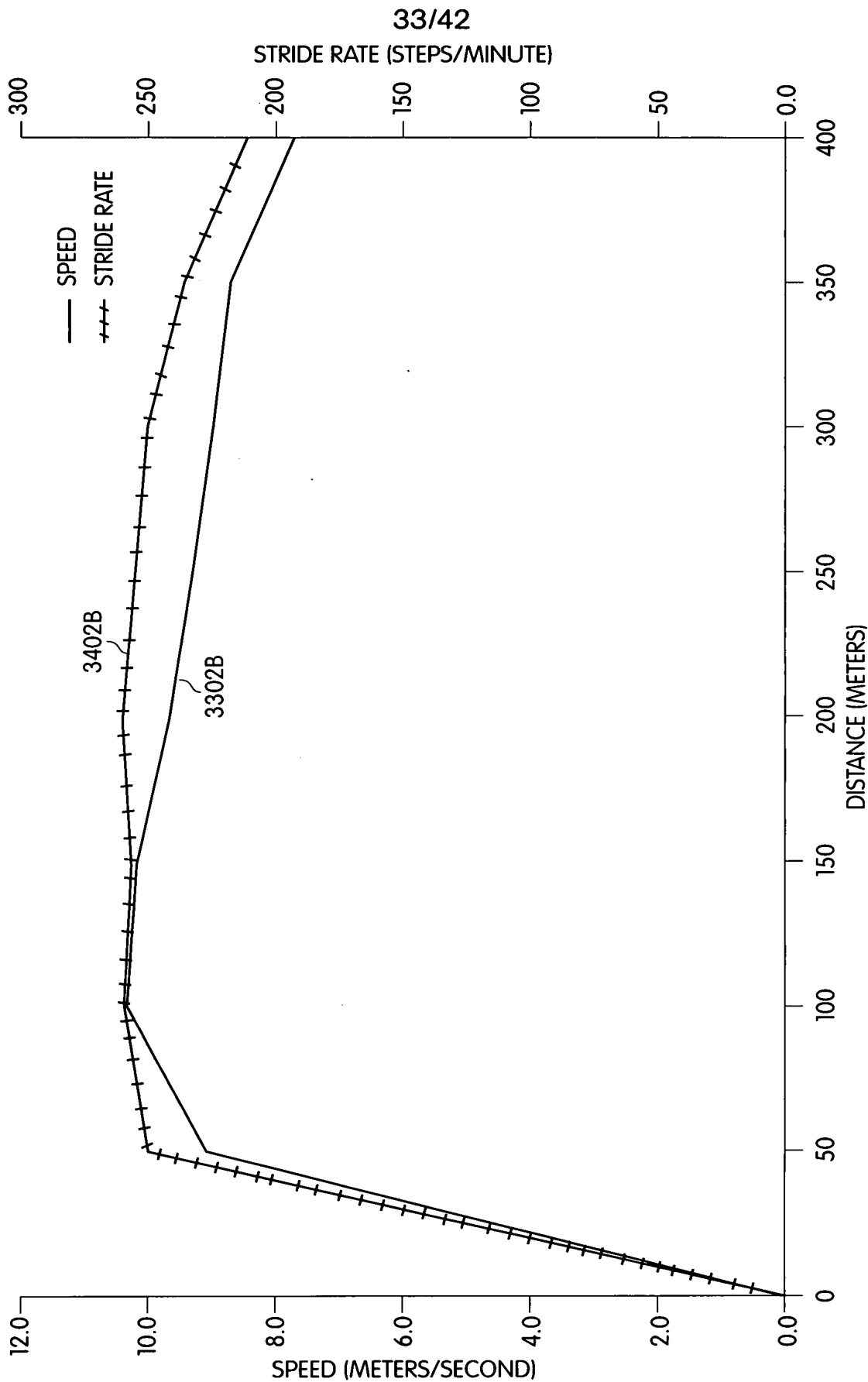
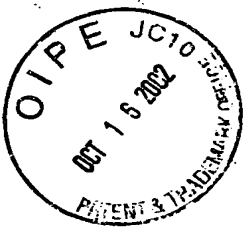


Fig. 34B



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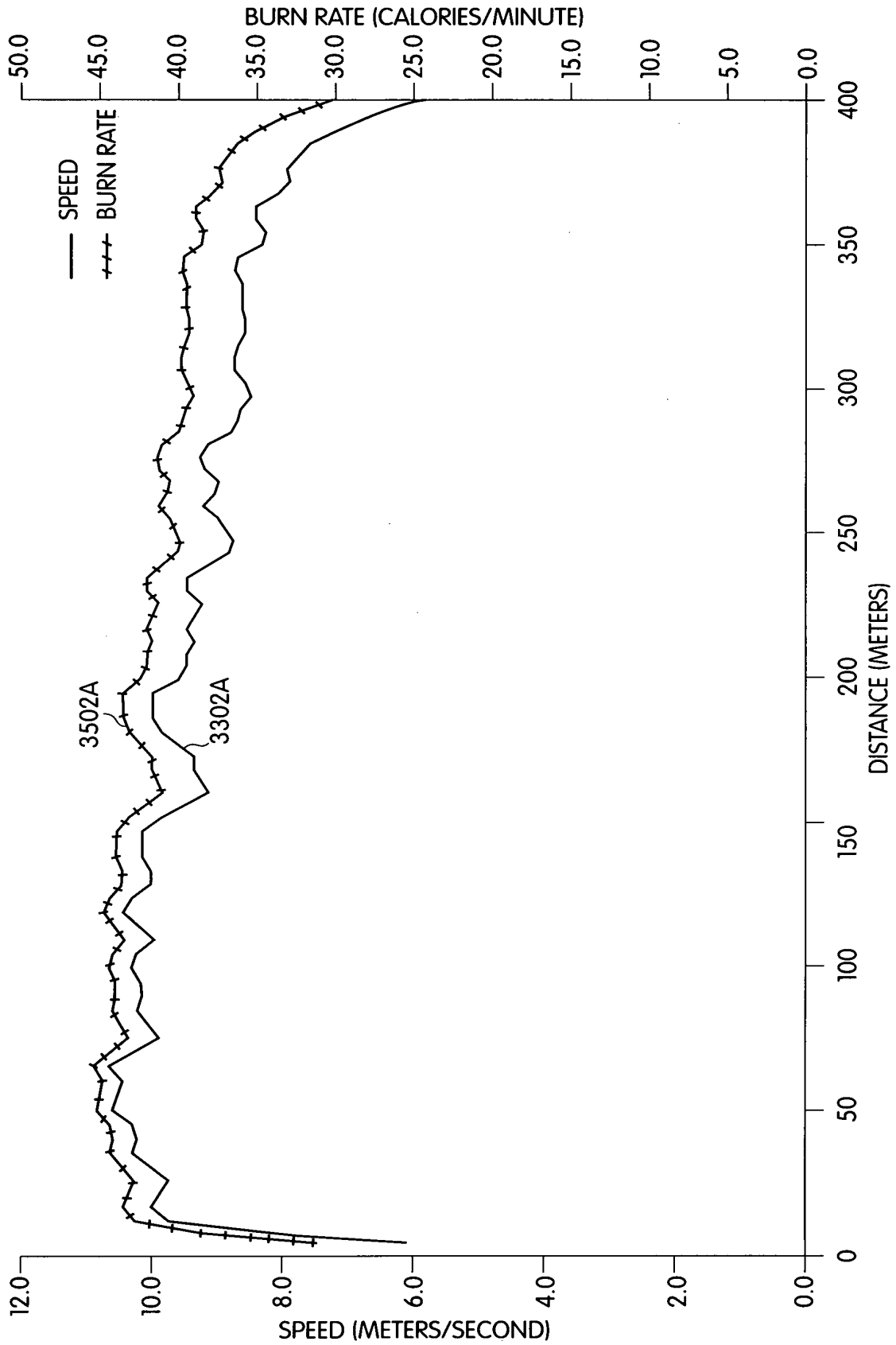
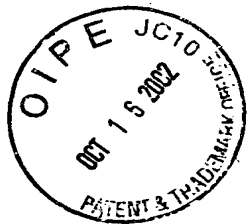


Fig. 35A



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BURN RATE (CALORIES/MINUTE)

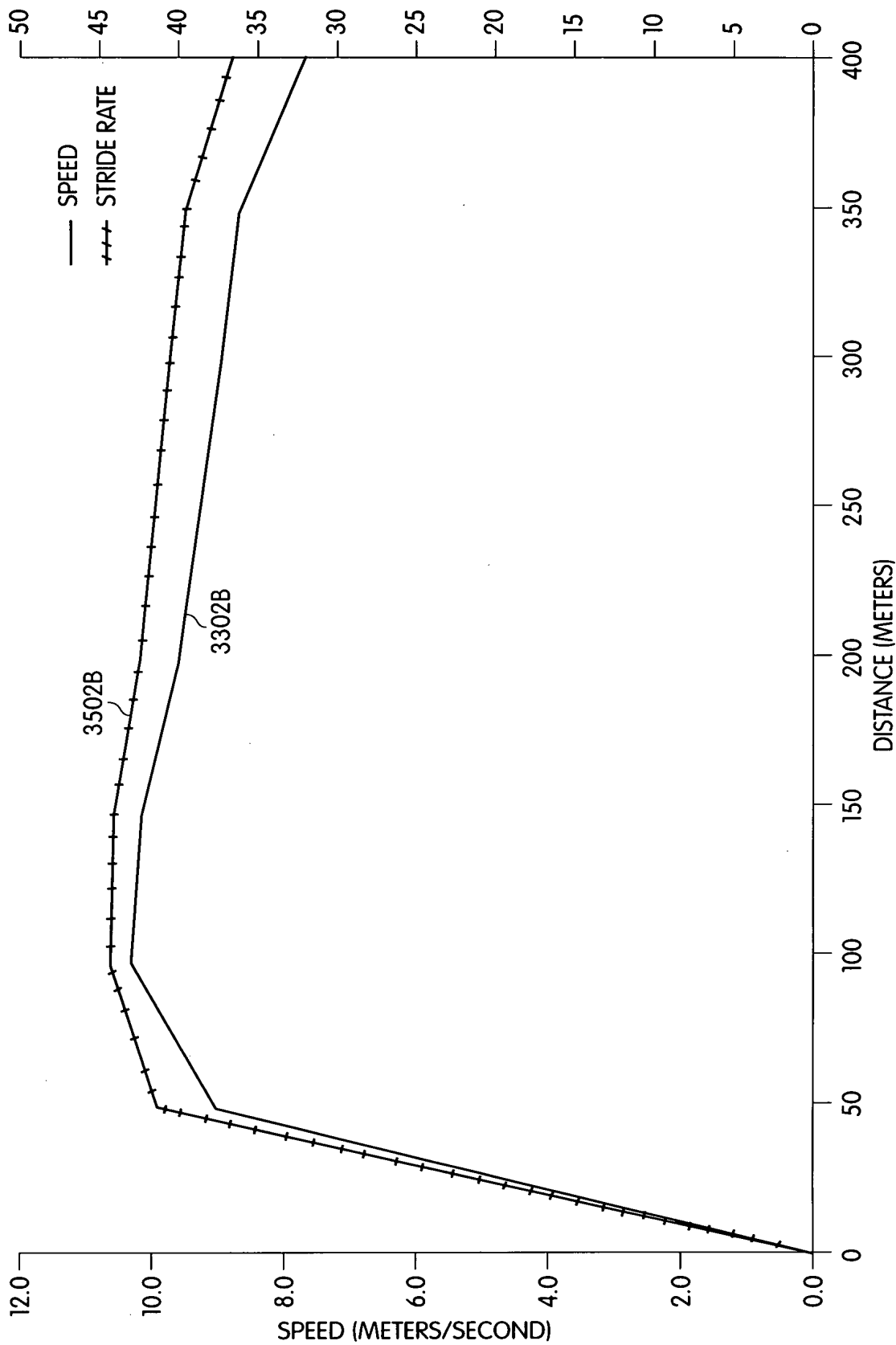
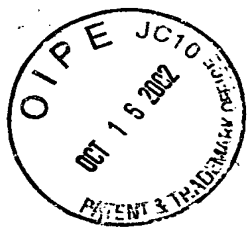


Fig. 35B



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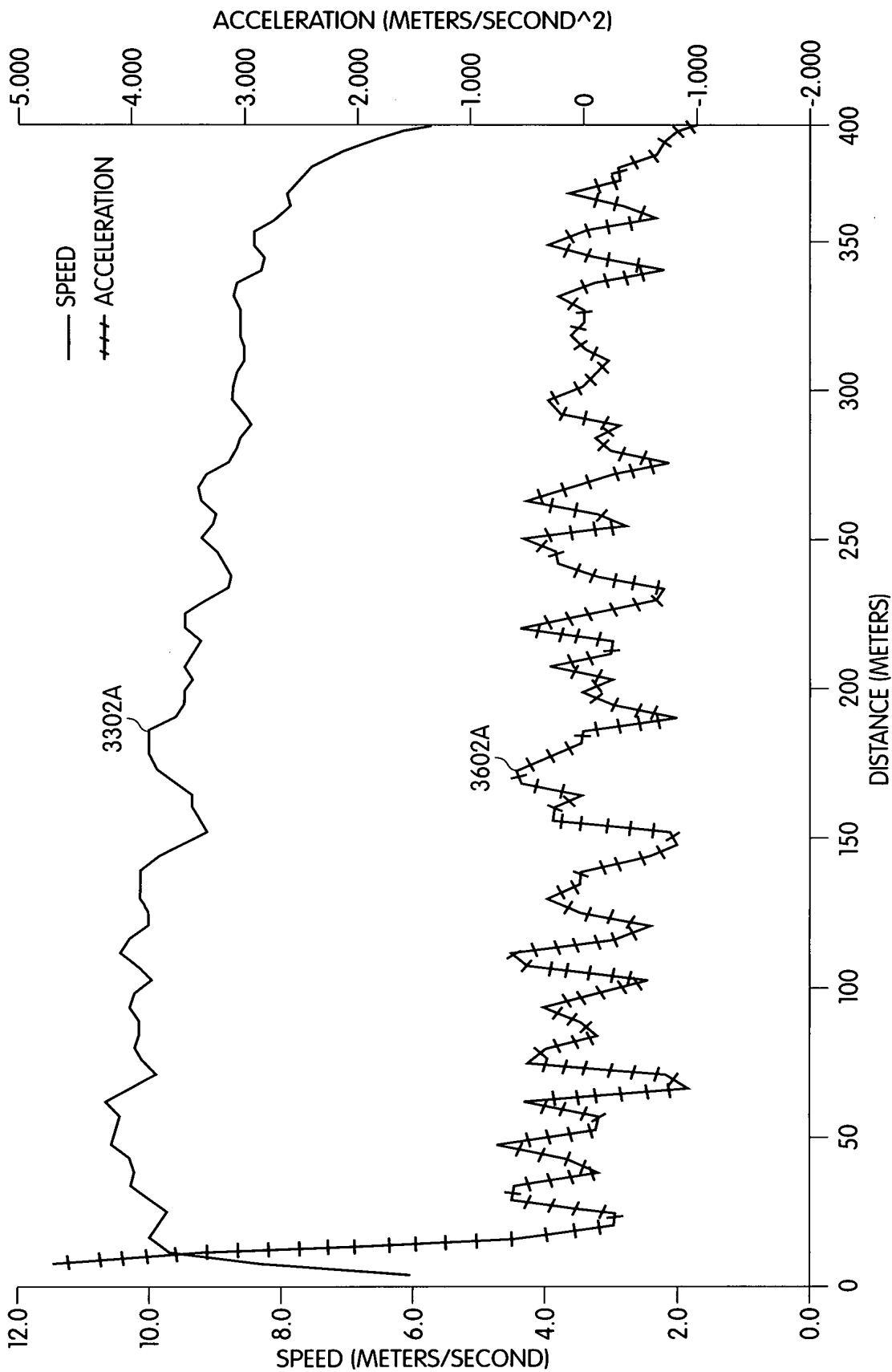
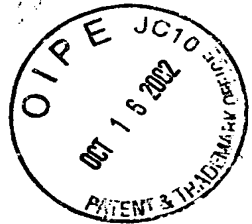


Fig. 36A



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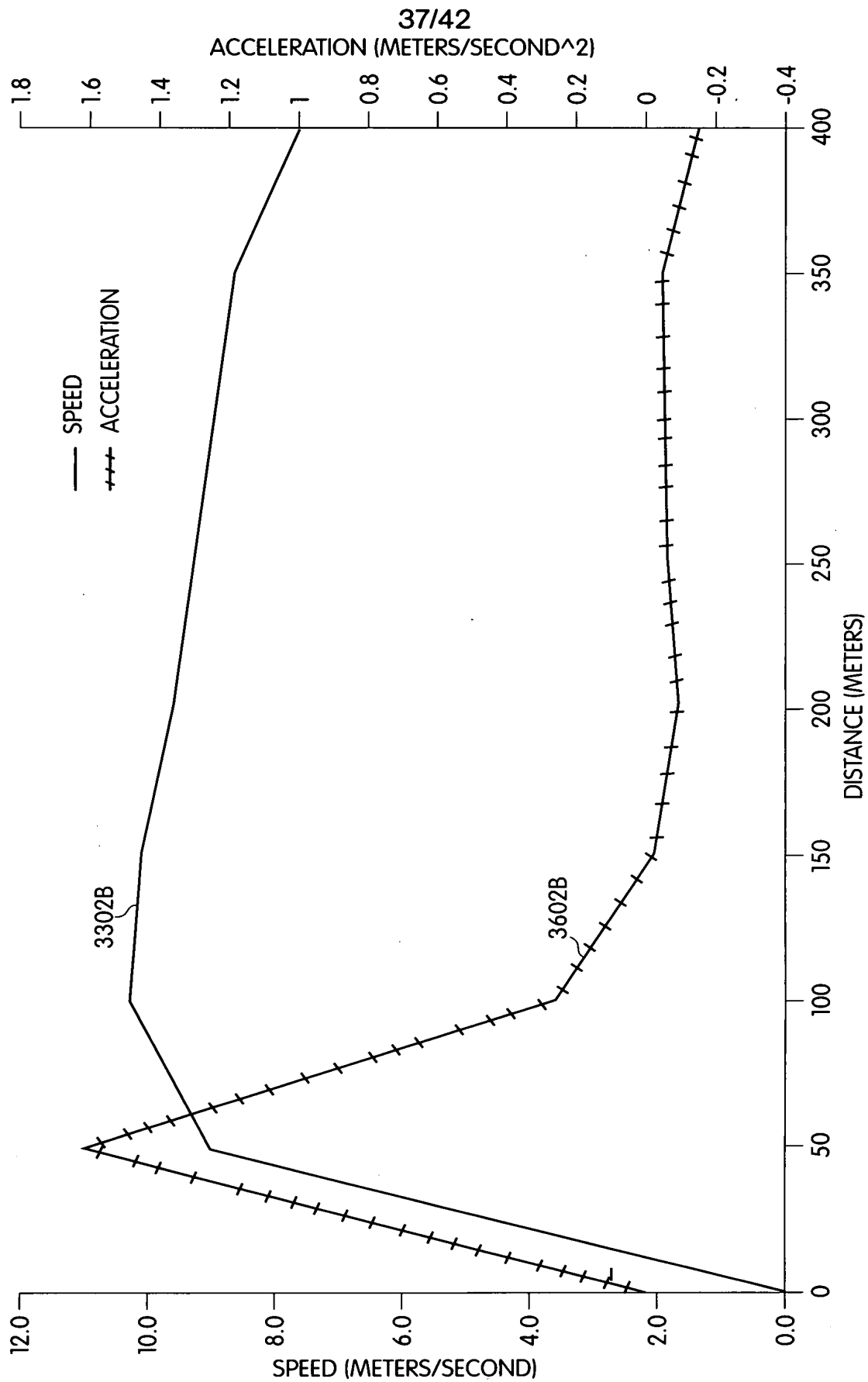
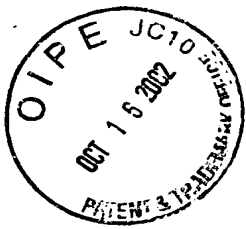


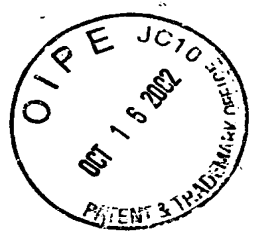
Fig. 36B



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DISTANCE	RACE TIME	SPLIT TIME	AVERAGE SPEED	AVERAGE SPEED	AVERAGE STRIDE LENGTH	AVERAGE STRIDE LENGTH		AVERAGE STRIDE RATE	AVERAGE BURN RATE	TOTAL CALORIES	ACCELERATION
METERS	SECONDS	SECONDS	METERS/SECOND	MPH	METERS	FEET	INCHES	STEPS/MINUTE	CALORIES/MINUTE	CALORIES	METERS/SECOND
0	0	0	0	0	0	0	0	0	0	0	0
50	5.6	5.6	9.0	20.1	2.22	7	3	249.5	41.1	3.7	1.621
100	10.4	4.9	10.3	22.9	2.39	7	9	257.9	44.2	7.3	0.257
150	15.4	4.9	10.1	22.6	2.37	7	9	256.1	43.9	10.9	-0.030
200	20.6	5.2	9.6	21.4	2.22	7	3	259.7	42.3	14.6	-0.100
250	26.0	5.4	9.2	20.7	2.18	7	1	255.1	41.3	18.3	-0.063
300	31.6	5.6	8.9	20.0	2.15	7	0	250.4	40.5	22.1	-0.054
350	37.4	5.8	8.7	19.4	2.20	7	2	236.1	39.6	25.9	-0.048
400	43.9	6.5	7.6	17.1	2.18	7	1	211.1	36.5	29.9	-0.155
SPLITS											

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INVENTOR: Ohlenbusch, et al.  
Serial No.: 09/643,190  
Docket No.: P00663.70020 (RMA)

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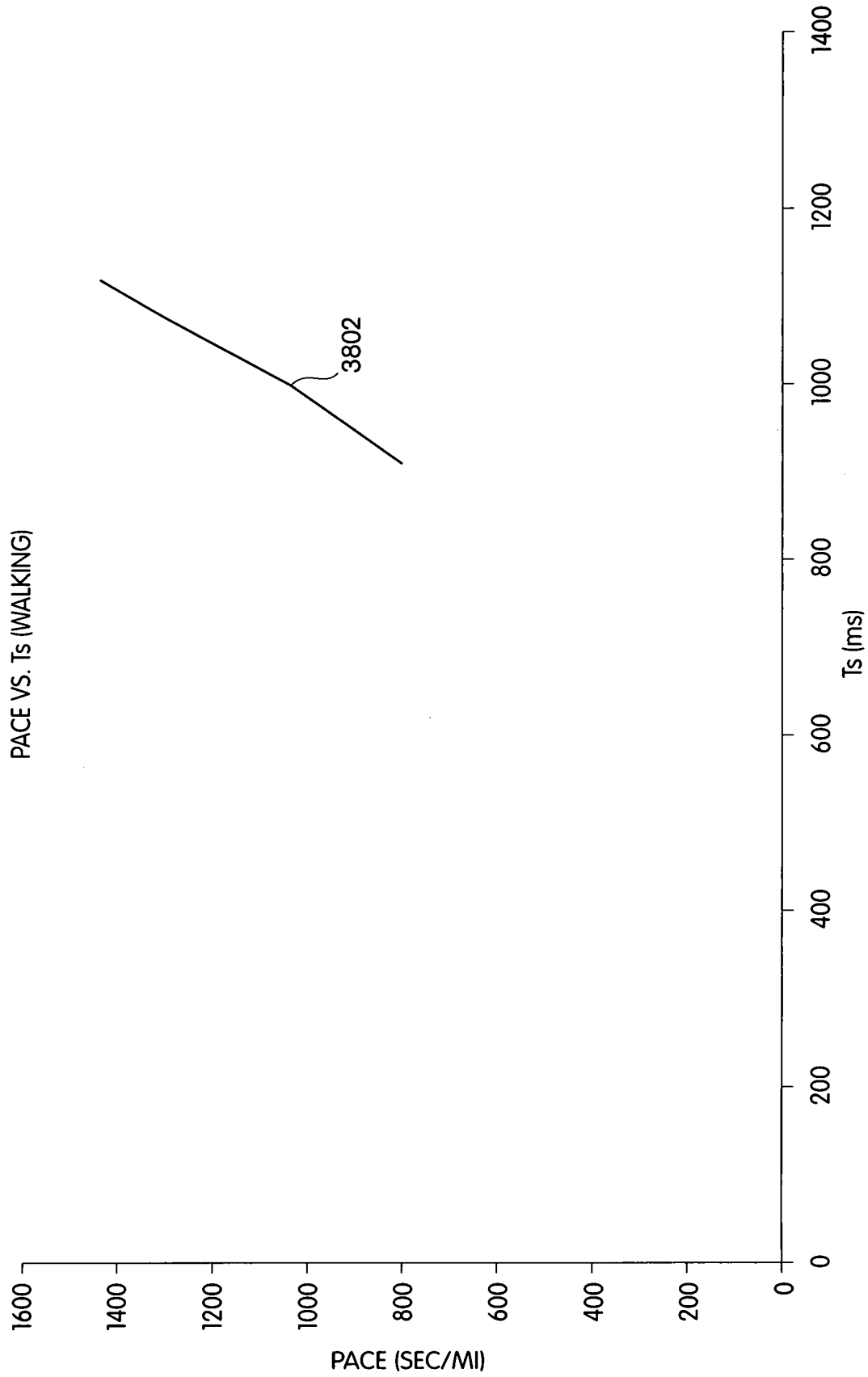
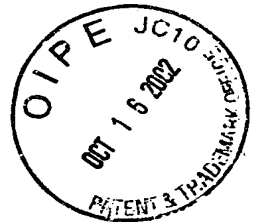


Fig. 38



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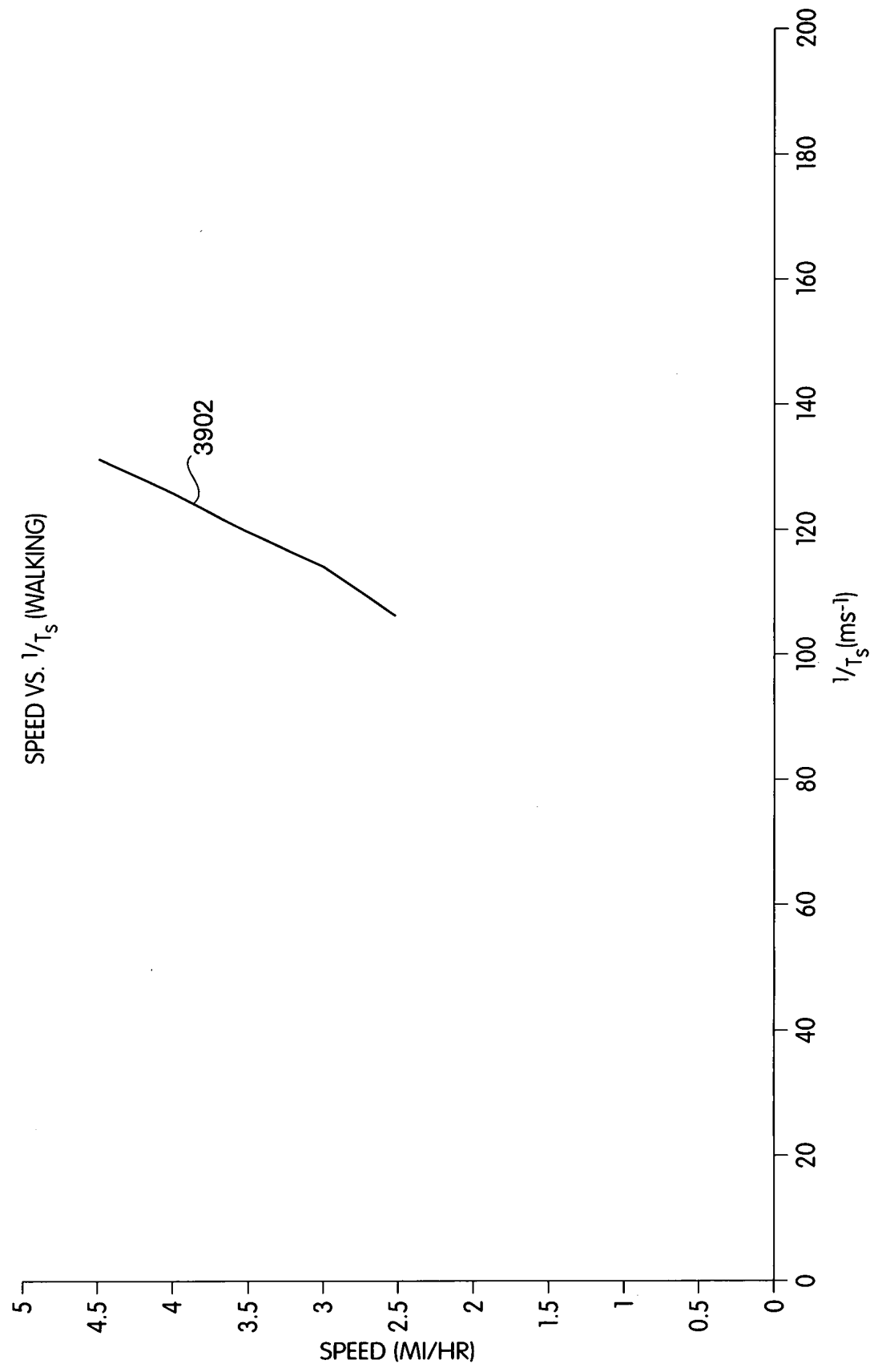
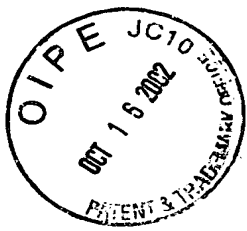


Fig. 39





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SPEED (MPH)	PACE (SECONDS/MILE)	Tc (ms)	Ts (ms)	AVERAGE GROUND FORCE (LBS)	STEPS PER MILE	STRESS PER 1/10 MILE (LBS)	STEPS PER MINUTE	STRESS PER MINUTE (LBS)
5	720	302	730	181	986	17881	82	14901
6	600	270	702	195	855	16667	85	16667
7	514	254	676	200	760	15177	89	17717
8	450	234	652	209	690	14423	92	19231
9	400	214	638	224	627	14019	94	21028
10	360	204	618	227	583	13235	97	22059
11	327	190	600	237	545	12908	100	23684

Fig. 40



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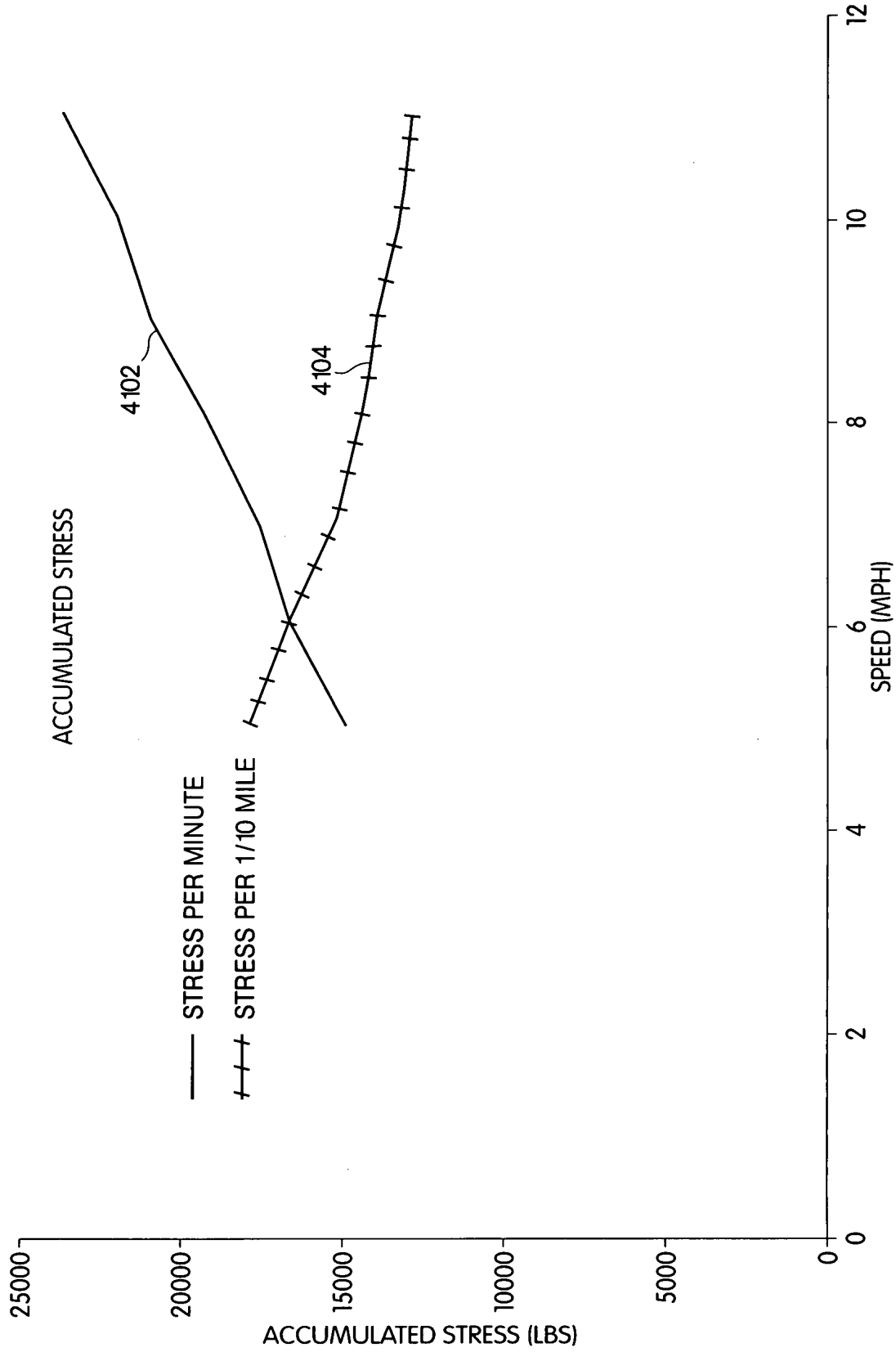


Fig. 41